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TO

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1853-'54.

IN THIRTEEN VOLUMES.

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33^d CONGRESS,
1st Session.

[SENATE.]

EXECUTIVE,
No. 59.

REPORT AND CHARTS

OF THE

CRUISE OF THE U. S. BRIG DOLPHIN,

MADE UNDER DIRECTION OF

THE NAVY DEPARTMENT,

BY

LIEUT. S. P. LEE, UNITED STATES NAVY.

WASHINGTON:

BEVERLEY TUCKER, PRINTER TO THE SENATE.

1854.

REPORT
OF
THE SECRETARY OF THE NAVY,

COMMUNICATING,

In compliance with a resolution of the Senate, the Report and Charts of Lieutenant S. P. Lee, commander of the United States surveying brig Dolphin.

MAY 5, 1854.—Read, and ordered to be printed ; motion to print 2,000 extra copies referred to the Committee on Printing.

MAY 9, 1854.—Reported in favor of printing 2,000 extra copies, which was agreed to.

NAVY DEPARTMENT, *Washington, May 5, 1854.*

SIR: I transmit, in compliance with the call of the Senate of the 4th instant, the Report and Charts of the cruise of the surveying brig Dolphin, Lieutenant S. P. Lee, commanding.

I am, very respectfully, your obedient servant,

J. C. DOBBIN, *Secretary of the Navy.*

To the Hon. D. R. ATCHISON,

President of the Senate.

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0 Above a deep sea sounding denotes no bottom.

0 Below a deep sea sounding denotes bottom.

A small star (*) designates latitude or longitude derived from observations of a planet.

A large star (✳) designates latitude or longitude derived from observations of a fixed star.

All depths are in fathoms, unless where expressly stated otherwise.

ABSTRACT LOG
OF
THE UNITED STATES SURVEYING BRIG DOLPHIN,

LIEUT. SAMUEL PHILLIPS LEE, U. S. N., COMMANDING.

1851-'52.

CHAPTER I.

Dolphin is commissioned—Released from confidential orders—Swing brig at Sandy Hook for deviation of compass—Departure—List of officers—Objects of the cruise—Errors of ordinary air thermometers—Incorrectness of the ordinary method of trying currents from boats—Enter the Gulf Stream—Fresh and stale looking sea-weed there—Unsuccessful search for Potomac soundings and fields vigia—Leave the Gulf Stream.

The brigantine Dolphin was put in commission August 14, 1851, having been slightly repaired for five or six months service, after a long cruise in the East Indies, from which she had recently returned.

Relieved on the 26th of September from the "confidential" orders of July 29 and August 29, relating to the Lopez expedition; and having received the balance of the sounding line from the contractors, (225,000 fathoms single size, and 10,000 fathoms triple size fishing line, in all 235,000 fathoms of sounding line,) the Dolphin dropped down from the New York navy yard to Sandy Hook, for the purpose of "swinging ship" to ascertain the local deviation of the compasses.

October 8, 1851.—The local deviation having been determined, put to sea at daylight with a crew of 48 petty officers, seamen, and marines, and the following officers:

Lieutenant Samuel Phillips Lee, commanding officer and acting purser;

Passed Midshipman A. Barbot, acting master and executive officer;

“	J. P. Hall,	} Did the regular duty of lieutenants, and each in turn performed also the duty of assistant master—the objects of the cruise requiring many more astronomical observations and computations than usual.
“	E. Renshaw,	
“	J. D. Danels,	
“	W. K. Mayo,	

Passed Assistant Surgeon J. B. Gould;

H. C. Elliott, captain's clerk and draughtsman.

At 8 a. m., discharged the pilot, sending by him a muster roll of the officers and crew, and other official reports and our private letters. Crew employed making everything below and aloft snug for sea. At 4 p. m., shotted the guns, [four 32s of 27 cwt. each.]

The Dolphin is employed under the act of Congress of March 3, 1849, "for testing new routes, and perfecting the discoveries made by Lieutenant Maury in the course of his investigations of the winds and currents of the ocean."

The following is a brief synopsis of the instructions issued by the Navy Department:

1st. An hourly record of the direction and force of the wind; an hourly record of the portion, kind, and direction of clouds; hourly observations of the thermometer, barometer, and of the state of the weather.

2d. The hourly temperature of the surface water; the force and direction of currents and their limits; the transparency and saltness or specific gravity of sea water in different parts of the ocean, and its temperature at various depths from specimens brought up in wooden cylinders with valves. In addition to the indications from changes of temperature, currents were to be ascertained by comparing the position of our vessel, derived from well corrected dead reckoning with those deduced from many good astronomical observations, to be taken during daylight and twilight; and also by heaving the log, when becalmed, from a boat anchored to its cable and iron pot, using a square sunken block for under currents.

3d. Deep sea soundings were to be made in favorable weather, [using 32-pound shot and small fishing line, prepared and put on reels for the purpose,] as "the depth of the ocean is an important element towards a perfect understanding of the tides, their laws of motion, the course and form of the tidal wave," &c.

4th. An examination of all dangers about which there are doubts, either as to existence or position. A list of 56 of these doubtful dangers, which disfigure the best charts of the Atlantic ocean, was given. The track to be taken was first towards Europe, and through that portion of the ocean around and to the northward of the Western islands, which is clustered with these reported dangers; thence westerly to the Gulf stream, between 30° and 35° of north latitude; thence easterly by French shoal to examine the region lying between the equator and 7° south latitude, and between 15° and 25° of west longitude, supposed to be volcanic, and remarkable for its oceanic disturbances and tide rips; thence from the equator to Cape St. Roque, sounding and carefully examining the currents between Fernando de Noronha and the main; thence, after having satisfactorily examined the equatorial and Amazonian currents, homewards, crossing four times over a strip of the sea, remarkable for its temperatures, lying about 150 miles wide on each side of a straight line drawn from 37° west longitude on the equator to Cape Charles, United States.

Deep sea soundings were, when practicable, to be taken along the whole of this track, and the reported dangers, rocks, shoals, &c., [commonly called vigias,] near it searched for.

The advanced state of the season required the postponement of the

investigations designed of that part of the Atlantic towards and near the Azores, and made it necessary to begin with the line leading towards the Cape de Verde islands.

It is matter of surprise that no one of the great maritime nations had not sooner authorized a regular official search to be made for the dangers, rocks, shoals, &c., which have been accumulating upon the charts from the beginning of the last century, delaying vessels by causing them to avoid the general locality of the danger, as is often done, or rendering navigation uneasy if not unsafe by neglecting this precaution.

Determining the exact position of such of these reported dangers as may exist, and expunging from the charts such as cannot be found after such a search as upon a comparison of the original authorities with the track charts and detailed reports of surveying officers must remove all doubt, will be conferring a benefit on the commerce of the world.

October 9.—Calm until 2 p. m. The copper thermometers procured by the navy agent from Messrs. B. Pike & Son, New York, compared with our standard thermometer made by J. Green, New York, [which was on the return of the Dolphin tested at the Naval observatory, Washington, and found correct,] showed errors varying from 1° to 6° . Each thermometer was numbered, the period during which it was used entered in the log-book, and the observations made with it corrected, before being entered in this abstract. At 11 a. m., in 30 fathoms water, the temperature of water at 27 fathoms, brought up in a wooden cylinder, was 6° less than the surface water: the same thermometer was used for both observations. At 2h. 30m. p. m., breeze light from ESE., and smooth sea; hove to and lowered both whale boats for Lieutenant Commanding Lee to try currents. Anchored one boat with an 80-pound kedge and 50 fathoms of line in 32 fathoms water. Used for log line a small well stretched fishing line, marked to tenths of a knot with wooden corks, [painted black on the stray line, red at each knot, and white at each tenth,] which served as marks and to keep the line from sinking. For under currents used a leaded block one foot square, and painted white, suspended to an inflated canvas bag shaped like a cocked hat, but larger. Found the surface current, by the mean of three good trials, to set NW. by W., at the rate of $\frac{5}{10}$ of a knot per hour, and the under current at 10 fathoms, also at 20 fathoms, to have the same set and rate as the surface current. Then lowered a pitch kettle 27 fathoms from the bow of a second boat, and hove the log from it, having the log chip end of the line made fast in the stern of the first boat anchored by the kedge, and found the second boat to set NW. by W. at the rate of $\frac{5}{10}$ of a knot per hour. Hauled up the iron kettle, and hove the log again from the second boat, with the log chip fast in the first boat, and found the second boat to drift $\frac{5}{10}$ of a knot per hour NW. by W. The breeze was still light and the water smooth; though the rate of current by this kind of observation cannot be determined with precision to the tenth of a knot, yet the result of this experiment suggests the probability that in trying currents, especially under currents, and particularly where the pitch kettle has less cable than the leaded block suspended to a float, it may be the boat drifting to leeward of the float, and not the latter moving off to windward *as has been sometimes reported.*

There is almost always, when such observations are made, light airs or a gentle breeze acting upon boat and crew, and setting them to leeward, accompanied by a sea or swell setting the boat to leeward, and sometimes across the wind, increasing the drift or modifying its direction. These causes have much less influence on a small float held by a weight (which is below the troubled surface) and which has much less bulk than the boat to be acted upon, and a much greater weight in proportion to drag, than the boat has in the kettle which holds it. At 3h. 30m. p. m., made sail. The variation entered in the column of abstract log refers to the place, not to the time of observation.

October 10.—At 7h. 30m. a. m., and at 1 p. m., shortened sail, hove to, sounded with a Stellwagen cup attached to the lead, and took under surface temperatures as per column. [At 4 a. m., noon, and 8 p. m., the abstract log shows the compass point from which the wind has most prevailed for the preceding eight hours. On other occasions it is given for the time against which it is entered.]

October 11.—Entered the northern edge of the Gulf stream at 7 a. m., in latitude $37^{\circ} 39' 51''$ N., (D. R.) and longitude $70^{\circ} 57' 00''$ W., (D. R.) shortened sail, hove to, sounded and took sub-surface temperatures.

The temperature of the surface water has risen 7° within the last hour, from 68° to 75° (F.) Obtained no astronomical observations to-day owing to bad weather; sky overcast and weather squally. At noon saw a little seaweed. At 1h. 30m. p. m., passed near a flock of sea birds over a shoal of fish, all going east. At sunset, under snug sail, blowing a fresh gale from the E., with threatening appearances.

October 12.—Lying to during the night. From midnight to 3 a. m., the barometer fell $\frac{2\frac{1}{2}}{100}$ of an inch. In a heavy sea, the excessive motion of the barometer impairs the value of its indications. In the forenoon, weather moderating, made sail. Too much sea on to take under surface temperatures. During these 24 hours, the gale worked round from east to south.

October 13.—Since entering the Gulf stream on the 11th instant, we have been set along its northern edge by strong head winds and heavy sea, the thermometer varying from 71 to 79.

From 8 a. m. to noon, passed seven pieces of new plank, (from the deck load of some vessel probably,) and through fresh seaweed ranged in lines parallel to the wind. At 4 p. m., blowing hard, a very heavy and irregular sea running. Laid to during the night, under close reefed fore-trysail and mainsail. During these 24 hours the gale worked round from south to west. Guys to prevent the barometer from striking the bulkhead, and from swinging too violently, increase the sudden check it receives. India rubber springs would relieve this.

October 14.—Wind variable between NNW. and SW., moderates. At 2 p. m., took temperature sounding, using a wooden cylinder, bent on above Lieutenant Stellwagen's lead. A cross irregular sea running.

October 15.—Gale over, made sail at 8 a. m. Saw some fresh looking sea-weed. From noon to 1h. 30m. p. m., taking under surface temperatures, with the sails clued up snugly, but not furled. Used Green's thermometer (F.) in a dry glass bottle screwed down at top, and wrapped with some cotton cloth to steady it in its iron bottle, which

was also closely screwed down. Used also a wooden cylinder, with a valve at each end opening upwards. Bent both on at five fathoms above a 56lb. lead, fitted with Lieutenant Stellwagen's cup. The wooden cylinder (the same which came up filled with water yesterday) brought up no water either at the 200 or afterwards at the 300 fathoms cast. Green's thermometer, which went down with its index at 70° , came up showing 53° the first and 47° the second trial. The water forced itself into both the iron and the glass bottles. Preserved specimens of this water and of the surface water.

October 16.—At 2h. 20m. a. m., furled all sail, and cast with a 56lb. Stellwagen's lead and 440 fathoms line, about 420 up and down. Sea very rough. From 4 to 6 p. m., passed through large quantities of fresh looking sea-weed, the stems of which, when examined, proved to be dead.

POTOMAC SOUNDINGS.

October 17.—At 4h. 20m. a. m., with furled sails, got a cast of the lead from the brig with 400 fathoms of line up and down, at which depth Green's thermometer, (F.), sent down in an iron bottle with its index at 67° , came up showing a temperature of 51° . At 11h. 15m. a. m., again sounded from the brig with furled sail, having 430 fathoms line up and down, using a 56lb. Stellwagen's lead and Green's thermometer (F.) in an iron bottle; the index which went down showing 62° , came up at 64° , with a broken column of mercury, some of it above the index. At 6h. 08m. p. m., when near Potomac shoal, shortened sail, hove to, and sounded with 400 fathoms line, no bottom.

October 18.—At 1h. 45m. a. m., being [by good observations of Polaris at twilight last evening, and of the sun yesterday afternoon, with our run corrected with especial regard to the current since then] in latitude $38^{\circ} 10' N.$, and longitude $67^{\circ} 26' W.$, where Captain Smith, of the ship Potomac, of Alexandria, United States, is reported [on page 467 of Laurie's memoir of the Atlantic ocean, London, 1845] to have found bottom at 90 fathoms in June, 1838, sounded, having all sails furled, with 400 fathoms of line, but got no bottom. The assigned position of the shoal is by the given latitude and longitude, in the strength and on the northern side of the Gulf stream, though the account says it is on the "southern side of the stream." At 4h. 30m. a. m., there was a halo of 25° semi-diameter around the moon. At 8 a. m., a large flock of birds around the brig. At 9 a. m., secured everything for a gale from SE. by E. Saw some sea-weed in the afternoon. At 7 p. m., lying to. Sea very heavy.

October 19.—Lying to, under close reefed mainsail and fore-trysail. Heavy rolling sea, shipped a little water occasionally. Storm working round to SSE. at 1 a. m., to SW. at noon, and to W. at 9 p. m., and beginning to moderate. Before sunset, saw what appeared to be part of a vessel's caboose. Passed a good deal of stale looking sea-weed in lines parallel to wind and sea.

October 20.—At 0h. 30m. a. m., made sail. From 10 a. m. to noon, hove to, and made several unsuccessful efforts to take temperatures with wooden cylinders. With a strong wind from NW. to W. by S.,

had a long swell to ENE. Passed much old sea-weed in lines parallel to wind. Saw the northern lights faintly between 8 and 9 p. m.

FIELD'S VIGIA.

October 21.—Calm from midnight to 8 a. m., and light airs during the day. Saw much sea-weed, generally fresh looking, with some firm berries floating in fields and small bunches.

At 5 p. m., furlled sail and lowered a boat, with Lieutenant Commanding Lee, Mr. Hall, and Mr. Renshaw, to sound and try currents. The current was NE. 1 knot per hour, from three agreeing trials. The boat was riding to an iron pot suspended by 60 fathoms cable. Made several ineffectual attempts to sound with the wrapping twine, first provided for us at New York, (which had been thoroughly overhauled there, and all the worst looking places cut out before marking it,) and found that it soon unlaid and parted, and was utterly worthless for this purpose. But we have a large supply of the small fishing line for future use.

Got frequent casts using a Stellwagen lead to a coasting line with Burt's nipper, and kept a good lookout for danger, being near Field's vigia.

October 22.—Searching for Field's vigia, reported on page 466 of Laurie's Atlantic Memoir, London, 1845, as having been discovered "April 1, 1833," by the master of the "schooner Little Mary," bound from Antigua to St. John's, New Brunswick, who says, "at 4 a. m., tried temperature of the water, and found myself in the Gulf stream. At 6 a. m., the water still warm. At 8, found the water very cold and of a dark and muddy color; every appearance of being on soundings. At about a mile to the westward the surface of the sea appeared as if breaking, or rather rolling over a shoal; saw great quantities of small fish rise occasionally in shoals, and porpoises. At 10 found the water warm again, and of the blue ocean color, and continued so until 4 p. m., of the 2d. Latitude of shoal corrected at noon $37^{\circ} 31' N$. Longitude *by account* $66^{\circ} W$. Partly determined to return and sound, but the wind was fair, and as there was every appearance of a NE. snow storm coming on, was deterred from doing it. On making the land within the Bay of Fundy, on the 6th, the reckoning was only 18 miles to west of the vessel; and having sighted Bermuda on the passage, the longitude given of the shoal cannot be far from the truth."

This alleged discovery was made on all-fool's day, April 1st, and its assigned position in longitude depends upon dead reckoning during the passage, from the time of sighting Bermuda to making land on the 6th of April, in the Bay of Fundy. The sudden variableness in the temperature of the water would suggest the idea of ice, if there was ever any known in this vicinity. Some change of temperature would be due to the fact that this vigia is located near the southern edge of the Gulf stream.

The surface temperatures and currents, found and laid down on our general track chart, indicate that the temperature of the sea from near the assigned position of this vigia on the southward and eastward, is but a degree or so higher than the general range of the surface tempera-

ture experienced in our voyage, thence (towards the Cape de Verdes) to about 27° N. and 40° W., and suggest the impression that the extended southern limit, recently assigned the Gulf stream, (see chart "engraved for Blunt's Memoir of the Atlantic ocean, 1851,") is probably incorrect. During the day we kept an extra number of look-outs stationed, and a deep-sea Stellwagen lead going constantly, sounding with from 40 to 60 fathoms of line, besides getting a 400 fathom cast from the brig, (hove to under short sail,) with a deep sea line and Stellwagen lead, at 3h. 50m. a. m.; and at noon a cast of 1,175 fathoms with the fishing line, (unwaxed,) and three 32-pound shot from the boat.

OCTOBER 22, 1851.

Latitude $37^{\circ} 26' 5''$ N., \odot m.; longitude $65^{\circ} 48' 16''$ W., \odot $\frac{a. m.}{p. m.}$

BOAT SOUNDING.—MR. HALL.

Fathoms.	Time A. M.			Intervals.	Fathoms.	Time A. M.			Intervals.
	<i>h.</i>	<i>m.</i>	<i>s.</i>	<i>m.</i> <i>s.</i>		<i>h.</i>	<i>m.</i>	<i>s.</i>	<i>m.</i> <i>s.</i>
Cast....	11	41	54		700	11	54	53	2 39
100	11	42	28	0 34	800	11	57	28	2 35
200	11	43	45	1 17	900	12	0	8	2 40
300	11	45	30	1 45	1,000	12	3	1	2 53
400	11	47	33	2 3	1,100	12	6	3	3 2
500	11	49	50	2 17	1,200	12	13	50	7 47
600	11	52	14	2 24					

Line parted; time running, 31m. 56s.; 1,175 fathoms; no bottom.

At 4h. 30m. p. m., having all sails furled, and being from observations of the sun at noon for latitude, and in the afternoon for time, in the position assigned to this vigia, lowered a boat and got a 500 fathom cast up and down without getting bottom, or seeing any sign of the reported danger, then, or at any other time during the day. We saw several sail during the day showing that this is a frequented track, and a good deal of sea-weed in irregular patches, both fresh and stale looking.

October 23.—Continued search for Fields vigia by the eye and lead, but saw nothing of it. The squalls being very short, did not materially affect the radius of vision, which was good.

At 4 p. m., a sail in sight. A plot is given of our track for these two days, and also for four other days, when we were in the vicinity of this vigia. The limit of our radius of vision during the search for vigias is shown on the respective track charts. Leave the Gulf stream.

CHAPTER II.

Unsuccessful search for "Anfitrite breakers"—See land birds, drift-wood, and flying fish—
 Make unsuccessful search for "Dyet's Rocks"—the "False Bermudas"—the "vigia of 1827"—"Gandaria's Rocks"—"Gombaudo's Rocks," and "Emily's Bonetta rock and Shoal"—Pass through the Sargasso sea, finding less sea-weed in it than in the space west of it—See but little sea-weed after leaving the eastern limit of the Sargasso sea, and none just after entering the tropics—Westerly winds change into NE. trades at the place assigned by Lieutenant Maury—Arrive at Port Praya—Find the African squadron and a provision ship there.

ANFITRITE BREAKERS.

October 24, 25, 26, 27, and 28.—During these five days made an unsuccessful search for Anfitrite breakers without seeing them, or any indication of danger. We sounded constantly with deep sea lead, and on the 25th, at 2 p. m., from a boat, with a 32-pound shot and 1,000 fathoms of (unwaxed) fishing line, in the assigned position of these breakers, in about latitude $35^{\circ} 52' N.$, longitude $65^{\circ} 56' W.$, according to the admiralty variation chart of June 23, 1851.

OCTOBER 25, 1851.

Latitude $35^{\circ} 52' 6'' N.$, $\odot m.$; longitude $65^{\circ} 56' 12'' W.$, $\odot p. m.$

BOAT SOUNDING.—LIEUT. COMMANDING LEE.

Fathoms.	Time P. M.			Intervals.	Fathoms.	Time P. M.			Intervals.
	<i>h.</i>	<i>m.</i>	<i>s.</i>	<i>m.</i> <i>s.</i>		<i>h.</i>	<i>m.</i>	<i>s.</i>	<i>m.</i> <i>s.</i>
Started...	2	22	17		600	2	33	37	2 40
100	2	23	20	1 3	700	2	36	36	2 59
200	2	24	47	1 27	800	2	39	36	3 0
300	2	26	30	1 43	900	2	42	53	3 17
400	2	28	36	2 6	1,000	2	46	35	3 42
500	2	30	57	2 21					

Line parted ; time running, 24m. 18s. ; no bottom.

On page 104 of the Nautical Magazine for February, 1851, it is stated, that from the 10th to 12th of May, 1846, the Spanish merchant ship Anfitrite, sailing from Havana to Cadiz, discovered a breaking of the water of about a cable's length in extent from NE. to SW., which they placed in latitude $35^{\circ} 50' N.$, and longitude by observation $59^{\circ} 46' 38''$ west of Cadiz, [or longitude $65^{\circ} 58' 38''$ west of Greenwich, counting from the position of the new observatory at Cadiz, in $6^{\circ} 12' 00''$ west of Greenwich.] This position we passed over while sounding on the forenoon of the 25th. During these four days we had generally a good radius of vision, and saw much sea-weed, sometimes in large patches, at other times in irregular lines ; the wind was light or moderate, except on the 27th, when it blew a gale from S. and hauled gradually to NW.

On the 25th, at 6 a. m., one of the look-outs aloft reported a rock ahead, which, when examined from aloft by two officers with spyglasses, proved to be a small schooner, which afterwards showed American colors. On the afternoon of the 24th several small land birds alighted on board, and on the afternoon of the 27th another such bird flew about the vessel. On both occasions we were in the immediate vicinity of the reported breakers, and about 200 miles north of Bermuda, whence these birds were probably blown by the strong south winds which prevailed previously. On the 28th we saw much sea-weed and several sail.

October 29.—Until to-day the temperature at the mast-head has been observed at 9 a. m., and at 3 p. m. This thermometer is encased in a wooden box, with a door, with an air passage from top to bottom, roofed over, and painted white. The box is sometimes in the sun. The observation was generally made by one intelligent person. The time of observation is given at the top of the column.

At 1 a. m., observed a remarkably lurid appearance in the NW., which gradually spread to N., and finally disappeared; the clouds round about, above and below, were of the cumuli and cumulo stratus kind. At 7 a. m., spoke the American bark "Hualto," of Belfast. Saw a few flying fish, (the first we have noticed,) and some sea-weed, which was fresh looking. At 2h. p. m., passed a sail standing to the southward and eastward.

October 30.—A large swell setting from the eastward. Repaired the mainsail. Saw much sea-weed of fresh appearance floating in lines parallel to the wind. Saw several sea birds.

October 31.—At 6h. 30m. a. m., passed a large old log. This forenoon passed a bark standing to the northward and westward, and saw one flying fish. This fish abounds in the tropics, and is not often known so far north as this, (35°.) Saw much sea-weed. The stalest looking appeared to float upon, and the freshest a little below the surface. A heavy cross sea on. Barometer steadily falling.

November 1.—Saw much sea-weed of a fresh appearance, arranged in patches or in broad lines parallel with the wind.

The winds, currents, variation, deep sea soundings, surface and deep sea temperatures, sea-weed, and drift-wood, flocks of birds, and shoals of flying and other fish, discolored water, tide rips, reported dangers, &c., mentioned in the log, are, as far as practicable, shown on the general track chart.

DYET'S ROCK.

November 2, 3, 4, 5, 6, 7, 8.—Made unsuccessful search for Dyet's Rock.

Sunday, November 2.—Had general muster, and Mr. Hall read the act of 1800 for the better government of the navy, to the officers and crew. It had been read in like manner by the executive officer, on the first Sunday of the two preceding months, and will be thus publicly read in turn by each of the sea officers during the cruise. The sea-weed seen to-day floated high and was generally stale. At 9h. 30m., a. m., put over the patent log, stationed extra look-outs and commenced taking

regular soundings in search of Dyet's Rocks. In the Nautical Magazine, London, 1845, page 437, the following appears:

“DYET’S ROCK—*Atlantic—no soundings.*—On my passage from St. Kitts to London, and when off Bermuda, May 17, 8h. a. m., we passed within 30 or 40 feet of two sunken rocks, having 6 or 8 feet water over them, it being very smooth at the time, in latitude 32° 46’ N., at noon, longitude 60° 06’ W., by a good chronometer, and by several lunar observations previously.

I strongly suspect they are the rocks marked as doubtful in latitude 32° 30’, longitude 59° W., hoping you will publish this for the benefit of navigation.” (Signed) “Robert Dyet, master of the bark Catherine Greene, of London.”

It was supposed in our search that the latitude above, given by Captain Dyet, was that of the rocks, and not the noon position of his vessel. At 3h. 20m. p. m., November 2, we passed over the assigned position of these rocks, sounding but getting no bottom, or seeing any appearance of any danger, and at 5 p. m. sounded from a boat with two 32-pound shot, but the fishing line (unwaxed) parted at 800 fathoms when running freely.

NOVEMBER 2, 1851.

Latitude 32° 46’ 0” N., ☉ m.; longitude 59° 56’ 20” W., ☉ p. m.

BOAT SOUNDING.—MR. HALL.

Fathoms.	Time P. M.			Intervals.	Fathoms.	Time P. M.			Intervals.
	<i>h.</i>	<i>m.</i>	<i>s.</i>	<i>m.</i> <i>s.</i>		<i>h.</i>	<i>m.</i>	<i>s.</i>	<i>m.</i> <i>s.</i>
Cast....	5	30	8		500	5	34	57	1 33
100	5	31	0	0 52	600	5	36	39	1 42
200	5	31	34	0 34	700	5	38	35	1 56
300	5	32	6	0 32	800	5	39	5?	0 30
400	5	33	24	1 18	Parted....	5	40	0	0 55

Time running, 9m. 52s.; no bottom.

Then, without anchoring the boat, hove the log from it and found it to drift off SSE. (to leeward) from the chip, at the rate of $\frac{5}{16}$ of a knot per hour. Then anchored the boat with 75 fathoms of cable to a sunken block, a foot square and heavily leaded, and hove the log again and found no perceptible difference in the boat's drift from the chip. The common method would be to call this drift a current in the opposite direction.

At 8 p. m., radius of halo round the moon, measured 21°.

November 3.—The sea-weed, in streaks with the wind, appeared fresh and floated low. Saw several dolphins. Kept the lead going. Blowing nearly a gale at night, with very rough sea.

November 4.—Sea heavy; gale from south; lying to.

November 5.—Under moderate sail continued sounding, and searching for Dyet's Rocks. The sea is very rough, and favorable for exposing sunken rocks near us.

November 6.—Calm forenoon. At 8 a. m., a look-out aloft reported breakers bearing SSW., which, when examined by an officer with a spy-glass, proved to be large patches of sea-weed, which, owing to the way the sunlight fell upon it, (with the sun partially obscured to us by clouds,) when raised on a wave, the sea around the sea-weed having a smooth glassy appearance, looked much like breakers to the naked eye, but the illusion was wholly dispelled by the spy-glass. Saw a fish alongside much resembling a large flounder. Near noon, renewed soundings, with a light variable breeze from southward and eastward. At 6 p. m., sounded from a boat with a 32lb. shot (without getting bottom at 550 fathoms) over the supposed position of these rocks, but a subsequent investigation showed that this sounding was made 52' of arc east of their reported place. Near 8 p. m., measured a halo round the moon of 23° radius. Much sea-weed seen to-day. It floated in lines with the wind or in large patches, and was of fresh appearance, but when taken up and examined, its stems were found dead and brittle at the end.

November 7.—Sounded until the afternoon, when we had too much wind and sea.

November 8.—We are now about 220 miles to the eastward of Bermuda, and have seen to-day several small land birds, and one mother Carey's chicken, and but little sea-weed. Continued sounding. At 8 p. m., concluded our unsuccessful search for Dyet's rocks, (or whales, which his description would answer for,) and made sail for the False Bermudas, distant about 30 leagues to the eastward.

November 9.—Mustered the crew. Much sea-weed in lines parallel to the wind. A heavy sea running. Some dolphin and flying fish seen.

November 10.—But little sea-weed seen. Heavy sea on. Showed our colors to an English ship standing to the southward. Sholes of flying fish seen occasionally.

November 11.—At 5h. a. m., broke water thermometer No. 17, and got up number 24 in place of it. Saw a shole of flying fish. Noticed much sea-weed of fresh appearance floating irregularly. Working up against wind and sea to get into the parallel of the

FALSE BERMUDAS.

November 12.—At 6 a. m., commenced sounding and searching for the False Bermuda as laid down on the English admiralty variation chart of June 23, 1851, in about latitude $32^{\circ} 10'$ N., longitude $58^{\circ} 14'$ W. Laurie's Memoir of the Atlantic, London, 1829, p. 305, quotes from Bellin, [probably M. Bellini, who was attached to the depository of charts and plans for the French navy, created in 1721, whose hydrographical labors for a long time enjoyed quite a great reputation,] that "about one hundred leagues east of Bermuda," "one Louis Duhal, in a corsair," saw a little shelf of rock, the existence of which M. Bellini says many doubt, and which he supposes have been mistaken for the rocks about Bermuda. Laurie mentions, p. 306, that Captain Bell, of the post office packet Francis Freeling, is supposed to have seen these rocks about 1810, "in about $33^{\circ} 45'$ N., and $55^{\circ} 25'$ W.;" and add

that Captain Hurd, [of the royal navy, subsequently hydrographer to the admiralty,] who surveyed the Bermudas, did not believe rocks to exist in this position, but supposed that some who had advanced by error too near the reefs to the east and southeast of Bermuda took them for rocks at a much greater distance from land—a supposition rendered more than probable from the imperfect means formerly used by many navigators. *Laurie* also mentions, on p. 306, as the probable origin of this alleged discovery by Captain Bell, that Mr. Nankivell, of the post office packet *Freeling*, returning from Jamaica, June 13, 1811, saw a rock with a black top in latitude $35^{\circ} 50' N.$, longitude $56^{\circ} 0' W.$, which he passed near to without firing at it, or sounding or sending out his boat, though the weather was very favorable. *Laurie* says that Nankivell was “sadly hoaxed about it,” and that “Captain Kirkness, of the dispatch packet, passing a short time afterwards in nearly the same direction saw several whales sleeping or basking in the sun.”

None of the thousands of vessels which have passed where the corsair *Duhal* appears to have located the Bermuda reefs in the early part of the last century, or where Nankivell was hoaxed for seeing what was probably whales, have in any way confirmed these two ancient and conflicting reports. Working up for the English position against a heavy sea and high wind, and in the afternoon being under low sail, made more leeway than headway. The height of the highest wave observed was nineteen feet.

November 13.—Made sail at daylight. Heavy swell from northward and westward. At 1 p. m., furled sail and took temperatures. Owing to the drift and swell some surface water got into the cylinder at the four hundred fathom cast. At 4 p. m., a sail in sight. At 4h. 50m. p. m., wind coming fair from westward, steered east, made sail, with patent log out, and sounded along the parallel of the False Bermuda. At 8h. 40m. p. m., having run rather beyond the extent of our view at sunset, shortened sail about four and a half miles west of the vigia, according to p. m. observations of the sun for longitude, and of Polaris at p. m., twilight, for latitude.

November 14.—No a. m. twilight observations; weather cloudy. At 9 a. m., being by our reckoning on the position of the vigia by the admiralty chart of June 23, 1851, furled sail and sounded from the vessel with two 32-pound shot and 350 fathoms line, 300 up and down, no bottom. The sea was too high and weather too squally for a boat to live. At 10 a. m., a vessel standing down for us was soon lost sight of in a sudden squall. The wind and sea now increasing fast, making further search impracticable, kept away and sounded along the parallel of the vigia.

The astronomical observations subsequently showed that our sounding at 9 a. m. was rather east of our supposed position at that time, though our radius of vision then extended beyond the assigned position of the vigia; but with a blow coming on, further delay in that vicinity was judged inexpedient, as the Navy Department had already ordered the False Bermudas to be expunged from our charts, in consequence of the report of Lieutenant Walsh, of the *Taney*, who had recently searched for them.

VIGIA OF 1827.

November 15.—Making a good run; for the first time ran nine knots per hour. At 3 p. m., being on the parallel of the vigia, put over patent log and began sounding. At 6h. 10m. p. m., from good observations of the sun at noon for latitude, and in the afternoon for longitude, we were in latitude $31^{\circ} 17' N.$, about the position assigned to the “vigia of 1827” on the admiralty chart of June 23, 1851, sounded from the brig with all sails furled, with two 32-pound shot and 500 fathoms of small line, up and down, without getting bottom. No appearance of any danger at sunset, when our radius of vision extended to the position of this “vigia,” for the existence of which we are not in possession of any other authority than the charts. Considerable sea during the day. Saw much sea-weed in lines parallel to the wind, but in smaller bunches than usual.

November 16.—Could not get any a. m. twilight observations. The latitude at noon showed that our traverse lines of soundings fell to the southward of the vigia. Beat up against a fresh wind and rough sea to within two or three miles of our sounding last evening on the assigned position of the vigia; having a good clear radius of vision extending several miles beyond and around it, kept away, got on, and ran along its parallel. Continued our search and soundings to the eastward without discovering any indications of its existence. Saw much sea-weed to-day; generally stale.

November 17.—Sea-weed to-day in small sprigs ranged in lines with the wind. Saw a shoal of porpoises and a few flying-fish. Parted the main boom at the cleat spike-hole, just outside the topping-lift. It was rotten at the heart. The swell from the northward keeps up and seems to increase.

November 18.—Saw sea-weed, both stale and fresh looking. Fitting the mainsail to the broken boom. At 4 p. m., furled sail and took temperatures and transparency; but a squall striking the vessel caused her to drift and impaired the observations—the cylinders coming up horizontally.

November 19.—Saw much fresh looking sea-weed in large bunches, several sea-birds, and a few flying-fish. At 4h. 20m. p. m., with all sails furled, took temperature observations. The casts were up and down, but owing to the drift the lines came up at a considerable angle. A large swell on. At night saw many shooting stars.

November 20.—At 2 a. m., entered the western side of the Sargasso sea, extending from 18° to $37^{\circ} N.$, and from 33° to $43^{\circ} W.$, (see Laurie's Atlantic Memoir, London, 1845, p. 187,) the supposed receptacle of the sea-weed and drift deposited by the equatorial, Gulf stream, and polar currents. Saw small quantities of stale sea-weed in detached bunches, sometimes in thin lines parallel with the wind. We are getting clear of the gales and heavy seas which have troubled us so much hitherto on the passage, and now use the patent log in addition to the common log.

November 21.—Saw but little sea-weed; its leaves are fresh and stems decayed, enveloped with a thin coralline coating, and thickly studded with small barnacles, and with small crabs in many of the

larger bunches. At sunset the sky was covered with cirro cumulus clouds, whose edges were beautifully tinged with vermillion, below which were heavy nimbus clouds, presenting a remarkable contrast.

November 22.—At 10h. 40m. a. m., furled sail, took temperature soundings from the brig, and lowered a whale boat for Mr. Hall to take a deep sea sounding and try the currents. The line parted at 500 fathoms, owing to the quick, short, and irregular sea, which affected the boat more than a long swell would have done. No satisfactory current observations could be made, as the boat drifted whilst riding to an iron pot and 80 fathoms cable. Saw fresh looking sea-weed, but with dead stems, in large patches. One grampus and several flying-fish seen. At 4h. 12m. p. m., again furled sail, took temperature soundings from on board, and Mr. Hall made two unsuccessful efforts to sound from the boat: the first time the line with three shot to it fouled the reel and parted; a squall interrupted the second cast made with two shot. At midnight found the patent log choked with seaweed.

November 23.—Saw more sea-weed than yesterday, looking fresh, and in lines parallel to the wind. At 0h. 35m. p. m., furled sail and took temperature soundings; lowered a whale boat for Mr. Hall to get a deep sea sounding. The fishing line doubled to 250 fathoms [unwaxed] with two 32-pound shot; parted at 800 fathoms. Rough sea and a long swell besides.

NOVEMBER 23, 1851.

Latitude $26^{\circ} 42' 42''$ N., \odot m.; *longitude* $38^{\circ} 38' 38''$ W., \odot $\frac{a. m.}{p. m.}$

BOAT SOUNDING.—MR. HALL.

Fathoms.	Time P. M.			Intervals.	Fathoms.	Time P. M.			Intervals.
	<i>h.</i>	<i>m.</i>	<i>s.</i>	<i>m.</i> <i>s.</i>		<i>h.</i>	<i>m.</i>	<i>s.</i>	<i>m.</i> <i>s.</i>
Cast....	1	12	22		500	1	19	27	1 50.5
100	1	13	19	0 57	600	1	21	37	2 10
200	1	14	28	1 9	700	0	0	0	0 0
300	1	15	58	1 30	800	1	26	1	4 24
400	1	17	36.5	1 38.5					

Line parted; time running, 13m. 39s.

Tried to get current observations from the boat riding to an iron pot with 80 fathoms cable to it:

Surface trial the chip was set $\frac{2}{10}$ SW.

At 40 fathoms the buoy bag was set $\frac{6}{10}$ WNW.

At 80 fathoms the buoy bag was set $\frac{2}{10}$ NNW.

These results are the mean of three trials, and give probably the drift of the boat in the opposite direction. A large light body, like a whale boat riding to an iron pitch pot with 80 fathoms cable, would drift faster than the buoy bag, (to which the chip end of the log line was fastened,) weighted with the heavily leaded foot square block suspended by 80 fathoms of line. At 4 p. m., found that the new tow

line of the patent log had twisted up; changed the tow line. Height of swell, observed when the stern of the brig was in the trough of the sea, was 12 feet. The sea from the northward, which still keeps up, interferes with getting successful deep sea soundings in this horse latitude region, which had been looked forward to as a part of the sea very favorable for an operation which requires a calm smooth time.

GANDARIA ROCKS.

November 24, 25, 26, 27.—Sounding and searching for Gandaria's rocks, of which the following account is given in Laurie's *Atlantic Memoir*: London, 1845, p. 468:

"GANDARIA ROCKS; lat. $25^{\circ} 30'$, and long. $37^{\circ} 45'$. The following notice of these rocks appeared in the *Gaceta de Madrid*, May 28, 1842: 'On Monday, April 18, Captain *Gandaria*, of the Spanish merchant ship *Dolores Ugarte*, 107 days from Guayaquil, saw from the deck of that vessel a group of rocks about a cable length in extent, and in the middle of them a large one, high and insulated, on which the sea broke violently. The latitude, at the time they were seen, was $25^{\circ} 29' 55''$, and longitude, by chronometer, $37^{\circ} 18'$. The latitude, observed at noon, was $25^{\circ} 40' 45''$, and longitude $37^{\circ} 49' 32''$ west of Greenwich, the vessel being at that time about four miles from the rocks. The observations for position may be depended on.'"

This account appears inaccurate; it represents that there was 11' difference of latitude, and $31\frac{1}{2}'$ difference of longitude between the position of the *Dolores*, when the rocks were seen from her deck, and her given position at noon, when the account states that the rocks were four miles off, whilst the given noon position shows that they were 11 miles off in latitude, and $4\frac{1}{2}$ in longitude. Searched in the position given, and in its vicinity, without seeing any indication of the high rock or of any other danger.

November 24.—Nine a. m., began running lines of soundings. At 2 p. m., being by good observations in the position assigned to this *vigia*, furled all sail, took temperatures and transparency observations from the brig, and lowered a whale-boat for Mr. Hall to sound with two 32lb shot, having the fishing line [unwaxed] doubled for the first two hundred fathoms. Mr. Hall thinks he got bottom at 1720 fathoms, and, with the boat thus anchored, he took the surface and under surface currents.

NOVEMBER 24, 1851.

Latitude 25° 30' 22" N., ☉ m.; longitude 37° 43' 56" W., ☉ a. m.

BOAT SOUNDING.—MR. HALL.

Fathoms.	Time P. M.			Intervals.	Fathoms.	Time P. M.			Intervals.
	<i>h.</i>	<i>m.</i>	<i>s.</i>	<i>m.</i> <i>s.</i>		<i>h.</i>	<i>m.</i>	<i>s.</i>	<i>m.</i> <i>s.</i>
Cast....	2	3	55		1,000	2	23	45	2 43
100	2	4	47	52	1,100	2	26	25	2 40
200	2	6	0	1 13	1,200	2	28	50	2 25
300	2	7	28	1 28	1,300	2	31	31	2 41
400	2	9	10	1 42	1,400	2	34	42	3 11
500	2	11	25	2 15	1,500	2	37	50	3 8
600	2	13	55	2 30	1,600	2	41	30	3 40
700	2	16	8	2 13	1,700	2	44	55	3 25
800	2	18	35	2 27	1,720	2	45	10	0 15
900	2	21	2	2 27					

Bottom ; time running, 41m. 15s.

There was a gentle breeze (3) from W. by N., sea smooth on the surface, with about 13 feet of long swell from WNW. According to the bearing of the chip from the boat the current at the surface, also at 40 fathoms depth, set W. by N. at the rate of $\frac{5}{16}$ of a knot per hour, and at 80 fathoms depth NW. $\frac{8}{16}$. Though the 1720 fathoms of small fishing line was up and down, and taut, and the shot to which it was attached was believed to be on the bottom, yet the probability is that the boat was drifting with or settling to the swell and breeze, and that the results found were but the boat's drift in the opposite direction, and not current. Such long and small cable would readily stretch enough to prevent a good current observation where there is any breeze or swell to act on the boat. Whilst sounding, the master, Mr. Barbot, on the topsail yard, with a spyglass, carefully examined the sea all around, having a clear and extensive field of view, without seeing anything unusual.

A correction has been applied in the abstract log for the errors of the chronometers found at Porto Praya.

November 25.—Saw much gulf weed.

November 26.—Saw an English barque, and much sea-weed.

November 27.—Got excellent observations for latitude and longitude at a. m. twilight. At morning twilight the objects can be reflected when they are bright, and kept near the horizon until it becomes good. At evening twilight the horizon is apt to lose its distinctness before the star becomes bright enough to be reflected well. Clearness of atmosphere and smoothness of sea being equal at both times, the observation is better made at the morning than at the evening twilight. Saw a shoal of flying fish. The broad leaf sea-weed floats high and is apparently stale.

At 4h. 40m. p. m., being from the sun at noon, and a. m., time sights in the position of the vigia, (the longitude in the abstract is derived from the p. m. sights for chronometers corrected back from

Porto Praya,) furled all sail, took temperature observations from the vessel, and lowered a whale-boat with Lieutenant Commanding Lee and Mr. Hall to sound with the fishing-line unwaxed. The reel got loose on its spindle and stopped running when 1,560 fathoms of line were out. The line came up freely when pulled; supposed it had parted before the shot (4 of 32lbs.) reached bottom.

NOVEMBER 27, 1851.

Latitude 25° 30' 0" N., ☉ m.; longitude 37° 42' 43" W., ☉ p. m.

BOAT SOUNDING.—LIEUT. COMMANDING LEE AND MR. HALL.

Fathoms.	Time P. M.			Intervals.	Fathoms.	Time P. M.			Intervals.
	<i>h.</i>	<i>m.</i>	<i>s.</i>	<i>m.</i> <i>s.</i>		<i>h.</i>	<i>m.</i>	<i>s.</i>	<i>m.</i> <i>s.</i>
Cast....	5	19	0		900	5	31	25	1 55
100	5	19	48	0 48	1,000	0	0	0	0 0
200	5	20	43	0 55	1,100	5	35	0	3 35
300	5	21	48	1 5	1,200	5	37	20	2 20
400	5	23	0	1 12	1,300	5	40	0	2 40
500	5	24	25	1 25	1,400	0	0	0	0 0
600	5	25	55	1 30	1,500	0	0	0	0 0
700	5	27	40	1 45	1,560	5	44	40	4 40
800	5	29	30	1 50					

Line parted; time running, 25m. 40s.; no bottom.

We have tried three shot, but found that this weight, with the motion of the boat, parts the line quickly. The patent log is not atken up until the end of a watch, unless the course is changed, or an observation is made in the mean time. When taken up allowance is made for the time it is out of water.

At night left for Gombaude's vigia.

November 28.—Passed a brig. Saw much sea-weed, apparently fresh. At 1 p. m. furled sail, took temperatures, and lowered a boat for Mr. Renshaw to get a deep sea sounding with the unwaxed fishing-line. Wind light, swell moderate, with slight toppling sea. 1st trial, the line parted when 450 fathoms were out, whilst running smoothly with three shot, (32s.) 2d trial, line parted at 1,000 fathoms, and when running slow with one shot.

SECOND TRIAL.

NOVEMBER 28, 1851.

Latitude 25° 04' 0" N., ☉ m.; longitude 36° 12' 53" W., ☉ p. m.

BOAT SOUNDING.—MR. RENSHAW.

Fathoms.	Time P. M.			Intervals.	Fathoms.	Time P. M.			Intervals.
	<i>h.</i>	<i>m.</i>	<i>s.</i>	<i>m.</i> <i>s.</i>		<i>h.</i>	<i>m.</i>	<i>s.</i>	<i>m.</i> <i>s.</i>
Started...	1	38	43		600	1	49	15	2 40
100	1	39	15	0 32	700	0	0	0	0 0
200	1	40	29	1 14	800	1	55	32	6 17
300	1	42	11	1 42	900	1	58	49	3 17
400	1	44	9	1 58	1,000	2	2	15	3 26
500	1	46	35	2 26					

Line parted ; time running, 23*m.* 32*s.* ; no bottom.

3*d trial* the line, with two 32-pound shot, parted, when 800 fathoms were out, at about 250 fathoms below the surface.

THIRD TRIAL.

NOVEMBER 28, 1851.

Latitude 25° 04' 0" N., ☉ m.; longitude 36° 12' 53" W., ☉ p. m.

BOAT SOUNDING.

Fathoms.	Time P. M.			Intervals.	Fathoms.	Time P. M.			Intervals.
	<i>h.</i>	<i>m.</i>	<i>s.</i>	<i>m.</i> <i>s.</i>		<i>h.</i>	<i>m.</i>	<i>s.</i>	<i>m.</i> <i>s.</i>
Started...	2	26	48		500	2	34	2	2 0
100	0	0	0	0 0	600	2	36	3	2 1
200	0	0	0	0 0	700	2	38	20	2 17
300	2	30	15	3 27	Parted...	2	40	35	2 15
400	2	32	2	1 47					

Time running, 13*m.* 47*s.* ; no bottom.

In hauling this end in, considerable resistance was felt ; the fracture was found to be at a weak place in the line. Mr. Renshaw then tried currents, but thinks that the boat and pot drifted off from the leaded block and inflated nipper bags to which it was suspended.

November 29.—The constant swell we have experienced from the northward, and northward and westward, indicates the prevalence of heavy blows from those quarters. At 7*h.* 30*m.* a. m a rainbow came down in a squall of small rain from NW., to within a cable's length of the vessel ; the inner bow was a perfect arch, altitude of its centre 23° ; the angle between its extremities was 76°. The outer bow was only visible in its extremities. The angular distance between the bows was

10°. Saw a vessel; noticed but little sea-weed; swell from northward and westward 12 feet high. At 10h. a. m. crossed the eastern limit (according to Laurie's Memoir) of the Sargasso sea. The Dolphin's log-book and general track chart for the cruise, show that there is no good reason either in regard to the deposit of sea-weed or flow of currents, for limiting the Sargasso sea to that part of the Atlantic lying between the parallels of 18° and 37° N., and the meridians of 33° and 43° W. It would appear more reasonable to extend this supposed eddy and receptacle of drift to the entire central part of the North Atlantic, within the margins of the polar, equatorial, and Gulf stream currents which surround it. Last night, whilst passing to the southward and near the intersection of 25° north latitude and 35° west longitude, from whence Maury's average limit of the NE. trade winds for November makes an elbow extending NW. and E., the wind, which had been moderate from SW., became strong (6) and unsteady; hauled round by the way of west to NNE. by noon, and became moderate, (4,) and by midnight became steady at NE., confirming, in a remarkable manner, Maury's northern limit of the NE. trades.

November 30.—At 6h. 50m. a. m. furled all sail, took temperature, got a specimen of water at 600 fathoms; sounded from whale boat, (Lieutenant Commanding Lee and Mr. Hall.) The sea was perfectly smooth on the surface, but there was a large, long, flat swell from the northward and westward.

This is the best day we have yet had for sounding. Made several casts from the boat with unwaxed fishing line: *1st trial*, the fishing line, with three 32s, parted at 300 fathoms. *2d trial*, line not doubled, parted with two shot at starting. *3d trial*, line doubled for 15 fathoms, parted with two shot at 650 fathoms.

THIRD TRIAL.

NOVEMBER 30, 1851.

Latitude 23° 42' 12" N., ☉ m.; longitude 32° 39' 0" W., ☉ a. m.

BOAT SOUNDING.—LIEUT. COMMANDING LEE AND MR. HALL.

Fathoms.	Time A. M.			Intervals.	Fathoms.	Time A. M.			Intervals.
	<i>h.</i>	<i>m.</i>	<i>s.</i>	<i>m.</i> <i>s.</i>		<i>h.</i>	<i>m.</i>	<i>s.</i>	<i>m.</i> <i>s.</i>
Started...	8	2	10		400	8	6	44	1 34
100	8	2	48	0 38	500	8	8	30	1 46
200	8	3	50	1 2	600	8	10	30	2 0
300	8	5	10	1 20	649	8	11	30	1 0

Line parted; time running, 9m. 20s.

4th trial, used one shot; the reel turned clear, and everything was favorable for getting a good cast. At 2,180 fathoms the line running very slow, checked it to try currents, but the line soon became very taut, and parted after a single trial had been made, showing the surface current to set ENE. $\frac{1}{2}$ of a knot per hour.

FOURTH TRIAL.

NOVEMBER 30, 1851.

Latitude 23° 42' 12" N., ☉ m.; longitude 32° 39' 0" W., ☉ a. m.

BOAT SOUNDING.—LIEUT. COMMANDING LEE AND MR. HALL.

Fathoms.	Time A. M.			Intervals.	Fathoms.	Time A. M.			Intervals.
	<i>h.</i>	<i>m.</i>	<i>s.</i>	<i>m.</i> <i>s.</i>		<i>h.</i>	<i>m.</i>	<i>s.</i>	<i>m.</i> <i>s.</i>
Started...	8	14	32		1,130	8	46	10	3 55
30	8	15	5	0 33	1,230	8	50	20	4 10
130	8	16	20	1 15	1,330	8	54	30	4 10
230	8	18	5	1 45	1,430	8	59	10	4 40
330	8	20	10	2 5	1,530	9	3	35	4 25
430	8	22	51	2 41	1,630	9	8	16	4 41
530	8	25	8	2 17	4,730	9	12	59	4 43
630	8	28	20	3 12	1,830	9	17	49	4 50
730	8	31	30	3 10	1,930	9	22	42	4 53
830	8	34	50	3 20	2,030	9	27	39	4 57
930	8	38	30	3 40	2,130	9	32	42	5 3
1,030	8	42	15	3 45	2,180	9	35	38	2 56

Bottom ; time running, 1*h.* 21*m.* 6*s.*

Then anchored the boat with an iron pot and 80 fathoms cable, but could not perceive any current. The transparency of the sea was observed with advantage; the sea was smooth, the weather clear and calm, and the block newly painted. We are now becalmed within the northern edge of the NE. trades.

5*th trial*, doubled the line for the first 200 fathoms, and used two 32-pound shot put on 30 fathoms apart. At 2,200 fathoms the line stopped running, and when several fathoms had been hauled in it became taut and parted. The officer and petty officers in the boat thought we had bottom. This sounding verified the previous sounding with one shot. Used this cast a nipper bag without nipper, but a small bull's eye instead.

FIFTH TRIAL.

NOVEMBER 30, 1851.

Latitude $23^{\circ} 41' 12''$ N., \odot m.; longitude $32^{\circ} 39' 5''$ W., \odot $\frac{a. m.}{p. m.}$

BOAT SOUNDING.—LIEUT. COMMANDING LEE AND MR. HALL.

Fathoms.	Time A. M.			Intervals.	Fathoms.	Time A. M.			Intervals.
	<i>h.</i>	<i>m.</i>	<i>s.</i>	<i>m.</i> <i>s.</i>		<i>h.</i>	<i>m.</i>	<i>s.</i>	<i>m.</i> <i>s.</i>
Started...	11	27	30		1,200	11	51	15	2 50
100	11	28	6	0 36	1,300	11	54	12	2 57
200	11	29	19	1 13	1,400	11	57	22	3 10
300	11	30	47	1 28	1,500	12	0	34	3 12
400	11	32	29	1 42	1,600	12	3	55	3 21
500	11	34	22	1 53	1,700	12	7	22	3 27
600	11	36	19	1 57	1,800	12	10	51	3 29
700	11	38	28	2 9	1,900	12	14	37	3 46
800	11	40	47	2 19	2,000	12	18	16	3 39
900	11	43	16	2 29	2,100	12	22	3	3 47
1,000	11	45	46	2 30	2,200	12	25	55	3 52
1,100	11	48	25	2 39	2,214	12	26	40	0 45

Line stopped; bottom at 2,200; time running, 59m. 10s.

6th trial, used three 32-pound shot with a view to further verification. Line tripled 100 fathoms, and doubled 400 fathoms. At 1,200 fathoms it parted, which was distinctly felt, and the reel stopped running.

SIXTH TRIAL.

NOVEMBER 30, 1851.

Latitude $23^{\circ} 41' 12''$ N., \odot m.; longitude $32^{\circ} 39' 5''$ W., \odot p. m.

BOAT SOUNDING.—LIEUT. COMMANDING LEE AND MR. HALL.

Fathoms.	Time P. M.			Intervals.	Fathoms.	Time P. M.			Intervals.
	<i>h.</i>	<i>m.</i>	<i>s.</i>	<i>m.</i> <i>s.</i>		<i>h.</i>	<i>m.</i>	<i>s.</i>	<i>m.</i> <i>s.</i>
Started...	2	29	21 ?		700	2	38	32	1 52
100	2	29	32	0 11	800	2	40	22	1 50
200	2	30	38	1 6	900	2	42	22	2 0
300	2	31	51	1 13	1,000	2	44	25	2 3
400	2	33	25	1 34	1,100	2	46	29	2 4
500	2	35	3	1 38	1,200	2	48	41	2 12
600	2	36	40	1 37					

Line parted; time running, 19m. 20s.

7th trial, with two 32-pound shot, the line parted at 800 fathoms.

SEVENTH TRIAL.

NOVEMBER 30, 1851.

Latitude 23° 41' 12" N., ☉ m.; longitude 32° 39' 5" W., ☉ $\frac{a. m.}{p. m.}$

BOAT SOUNDING.—LIEUT. COMMANDING LEE.

Fathoms.	Time P. M.			Intervals.	Fathoms.	Time P. M.			Intervals.
	<i>h.</i>	<i>m.</i>	<i>s.</i>	<i>m.</i> <i>s.</i>		<i>h.</i>	<i>m.</i>	<i>s.</i>	<i>m.</i> <i>s.</i>
Started...	3	9	0		500	3	15	30	1 40
100	3	9	50	0 50	600	3	17	26	1 56
200	3	10	55	1 5	700	3	19	28	2 2
300	3	12	16	1 21	800	3	20	20?	0 52?
400	3	13	50	1 34					

Line parted ; time running, 11m. 20s. ; no bottom.

Saw two “fin-back” whales playing around us whilst we were sounding, and one passed very near the line. Caught a dolphin, our first piscatory prize. The last of the vegetables laid in for the crew at New York, more than two months since, were issued to them this day: Our stock consisted of 916 pounds of Irish potatoes, and 234 pounds of onions; one pound of vegetables for each man three times a week, in lieu of a portion of the salt ration of equal value. These anti-scorbutics, and the oil-cloth clothes, and sea boots, which the crew were encouraged to get in New York, have kept the men in excellent health, notwithstanding the remarkable succession of bad weather which we have gone through.

GOMBAUD’S ROCK.

December 1 and 2.—Sounding and searching for Gombaud’s rock in “latitude 23° 15’ N., and longitude 32° 25’ W.,” as given in Laurie’s Memoir of the Atlantic, London, 1845, p. 468, where it is said :

“According to M. Fleurieu this danger was first seen in 1764, having been discovered by Gombaud, the commander of a merchant vessel of Rochelle. Upon this authority, *and this alone*, it has been continued, and its existence is, therefore, doubtful.”

December 1.—At 3h. p. m., being from good observations of the sun to-day in the position assigned this vigia, furled sail, took temperature observations from the brig, and lowered a boat for Mr. Hall to get a deep sea sounding, who made signal at 4 p. m. that he had got bottom; the line had ran prettily to, and stopped suddenly at 2,200 fathoms. The sea was smooth, air light; used two 32-pound shot; line tripled first 100 fathoms, doubled to 400 fathoms, and unwaxed.

DECEMBER 1, 1851.

Latitude $23^{\circ} 15' 3''$ N., \odot m.; longitude $32^{\circ} 24' 32''$ W., \odot p. m.

BOAT SOUNDING.—MR. HALL.

Fathoms.	Time P. M.			Intervals.	Fathoms.	Time P. M.			Intervals.
	<i>h.</i>	<i>m.</i>	<i>s.</i>	<i>m.</i> <i>s.</i>		<i>h.</i>	<i>m.</i>	<i>s.</i>	<i>m.</i> <i>s.</i>
Started...	3	9	15		1,300	3	37	13	3 6
100	3	10	8	0 53	1,400	3	40	20	3 7
200	3	11	23	1 15	1,500	3	43	44	3 24
300	3	12	53	1 30	1,600	3	47	6	3 22
400	3	14	37	1 44	1,700	3	50	31	3 25
500	3	16	35	1 58	1,800	3	54	16	3 45
600	3	18	39	2 4	1,900	3	57	55	3 39
700	3	20	52	2 13	2,000	4	1	45	3 50
800	3	23	15	2 23	2,100	4	5	50	3 55
900	3	25	45	2 30	2,200	4	10	19	4 39
1,000	3	28	31	2 46					
1,100	3	31	20	2 49	2,300	4	32	30	22 11
1,200	3	34	7	2 47					

Time running, 1h. 1m. 4s.; Bottom at 2,200 fathoms.

The line is most apt to twist off near the shot; after the shot is a few hundred fathoms below the surface, the line bears the motion of the boat better than at starting. At 5h. p. m. made sail. At 8 p. m., having run the extent of our radius of vision at 6 p. m., shortened sail for the night.

December 2.—Continued sounding and searching for the vigia; no appearance of any danger visible either yesterday or to-day. Saw some sea-weed. Picked up a corked bottle containing no current paper, but smelling of wine. Threw over a sealed bottle (previously painted white, and dry outside and in) containing our noon position. A large flat swell from northward and westward.

December 3.—Saw three sail to-day, and some sea-weed in line with the wind. At 2 p. m. furled sail and took temperature observations. The trade winds, which we took in $24\frac{1}{2}^{\circ}$ N. and 34° W., died out, when we had run about 120 miles to the southward and eastward; they sprung up again on the second day, but from the southward of east, and we did not lose them again, though we ran north to-day nearly to the latitude at which we found them on the 29th.

December 4.—Saw one sail. Heavy sea from the northward and eastward, which overrides the tenacious northward and northward and westward swell, of which we have had so much. No sea-weed.

December 5.—At 1h. 35m. p. m., with all sail furled, yards squared, &c., took temperature soundings. Saw a right whale.

December 6.—At 9h. 50m. a. m. furled sail, &c.; took temperature observations, and tried to sound from a boat, but the line soon parted, as the sea was short and irregular, and the boat very uneasy. No sea-weed to-day. Saw large quantities of flying fish, whose flight was to the northward and eastward—to windward.

December 7, Sunday.—Called the officers and crew to muster, and

Mr. Renshaw read (in his turn) the articles of war. At 10h. 30m. a. m. laid to with furled sail and squared yards; took temperature soundings on board; made a deep sea cast from a boat, when Mr. Hall got bottom at 1,970 fathoms with unwaxed fishing line, and one 32-pound shot.

DECEMBER 7, 1851.

Latitude 18° 39' 26'' N., ☉ *m.*; *longitude* 25° 24' 16'' W., ☉ *a. m.*

BOAT SOUNDING.—MR. HALL.

Fathoms.	Time A. M.			Intervals.	Fathoms.	Time A. M.			Intervals.
	<i>h.</i>	<i>m.</i>	<i>s.</i>	<i>m.</i> <i>s.</i>		<i>h.</i>	<i>m.</i>	<i>s.</i>	<i>m.</i> <i>s.</i>
Started...	10	48	27		1,100	11	18	35	3 55
100	10	49	34	1 7	1,200	11	22	44	4 9
200	10	51	17	1 43	1,300	11	26	35	3 51
300	10	53	31	2 14	1,400	11	30	33	3 58
400	10	56	0	2 29	1,500	11	35	0	4 27
500	10	58	42	2 42	1,600	11	39	5	4 5
600	11	1	35	2 53	1,700	11	43	40	4 35
700	11	4	35	3 0	1,800	11	48	8	4 28
800	11	7	50	3 15	1,900	11	52	54	4 46
900	11	11	10	3 20	1,970	11	56	20	3 26
1,000	11	14	40	3 30					

Bottom; time running, 1h. 7m. 53s.

[This line, which had been examined and measured at New York, had just been carefully re-examined on board in consequence of the line used on the 30th ultimo having parted so often, and a bad place had to be cut out for about every ten fathoms. The splices made at each cut increased the friction.] The sea was irregular and toppling; pulled lightly with one oar on each side to keep the line running up and down: up to 600 fathoms often checked the reel, to prevent its delivering the line too fast as the boat's bow rose to the sea, when the line would kink and sometimes reel up the wrong way; after that helped the shot all the time by pulling the line off the reel as in heaving the log. It was too fresh and rough to try currents. At 0h. 30m. p. m. made sail, and ran about 30 miles, when laid to under bare poles, and took temperature soundings from the brig, and a deep sea cast from the boat; Mr. Hall got bottom this time at 1,675 fathoms, with two 32-pound shot, unwaxed line.

DECEMBER 7, 1851.

Latitude 18° 19' 14" N., ☉ m.; longitude 25° 05' 10" W., ☉ p. m.

BOAT SOUNDING.—MR. HALL.

Fathoms.	Time P. M.			Intervals.	Fathoms.	Time P. M.			Intervals.
	<i>h.</i>	<i>m.</i>	<i>s.</i>	<i>m.</i> <i>s.</i>		<i>h.</i>	<i>m.</i>	<i>s.</i>	<i>m.</i> <i>s.</i>
Started...	4	5	0		900	4	21	14	2 21
100	4	5	53	0 53	1,000	4	23	40	2 26
200	4	7	8	1 15	1,100	4	26	17	2 37
300	4	8	39	1 31	1,200	4	29	54	3 37
400	4	10	20	1 41	1,300	0	0	0	0 0
500	4	12	15	1 55	1,400	4	36	19	6 25
600	4	14	2	1 47	1,500	4	39	35	3 16
700	4	16	3	2 1	1,600	4	42	56	3 21
800	4	18	53	2 50	1,675	4	46	6	3 10

Bottom; time running, 41m. 6s.

Restrained the turning of the reel up to 300 fathoms; used no friction, but occasionally assisted its turning between 300 and 500 fathoms, and all the time after that. Kept the boat up so that the line would run up and down by continually pulling slightly with two oars. After sounding broke the line. Whilst returning on board found, by heaving the log from the boat, that the bare brig had drifted one mile to leeward in one hour. Saw a large number of flying fish and small sea birds to-day.

December 8.—Saw a great many flying fish scared up by the vessel, and some Mother Carey's chickens. At 4h. 20m. p. m. furled sail and took deep sea temperatures; the lines came in slowly, and at a great inclination; it took 7½ minutes to sink the cylinder 400 fathoms, and 1h. 30m. to get it in with the winch; which machine has the advantage of keeping the men's clothing dry, but gives the result so slowly as to injure the observations; it is much quicker work to haul in the line by hand; but besides making the men wet and sick, in deep casts, their hands become soft and torn by the wet line, which is stiff from the strain upon it.

December 9.—Saw two sails, one of them a Neapolitan ship. Saw many flying fish. Passed a large piece of timber; some sea birds were upon and around it. The spindle of the binnacle compass became loose, screwed it tight. Too rough to lower a boat. Find it difficult to work this brig, now light, with a rough bow sea in twelve points; four picked men do all the steering, and constant vigilance is used to have them steer accurately and to prevent drift, from steering too close to the wind, which would vitiate the results of the comparisons required for ascertaining the set and rate of the current. In working up make no allowance to the courses steered and distance run, except for carefully observed leeway and variation. [Under this system the interesting result has been conspicuously disclosed, (see our general track chart and abstract log,) that what is commonly called current is only drift or lee-set. In time, with careful navigation, practical tables may be made,

showing the correction, from this cause, of the run for all parts of the sea, according to the weather, the class of vessel, and when going free, or full and by.]

December 10.—At 9h. 20m. a. m. brought by the wind under bare poles; took temperature soundings from the vessel, and a deep sea cast from the boat; Mr. Hall reports that he certainly got bottom at 1,612 fathoms, with two 32-pound shot, unwaxed line. The sea was long and tolerably regular.

DECEMBER 10, 1851.

Latitude 18° 11' 23" N., ⊙ m.; *longitude* 23° 48' 28" W., ⊙ a. m.

BOAT SOUNDING.—MR. HALL.

Fathoms.	Time A. M.			Intervals.	Fathoms.	Time A. M.			Intervals.
	<i>h.</i>	<i>m.</i>	<i>s.</i>	<i>m.</i> <i>s.</i>		<i>h.</i>	<i>m.</i>	<i>s.</i>	<i>m.</i> <i>s.</i>
Started...	9	54	17		900	10	10	27	2 20
100	9	55	12	0 55	1,000	10	13	0	2 33
200	9	56	28	1 16	1,100	10	15	40	2 40
300	9	58	0	1 32	1,200	10	18	18	2 38
400	9	59	45	1 45	1,300	10	21	10	2 52
500	10	1	38	1 53	1,400	10	23	47	2 37
600	10	3	39	2 1	1,500	10	26	35	2 48
700	10	5	50	2 11	1,600	10	29	40	3 5
800	10	8	7	2 17	1,612	10	30	15	0 35

Bottom ; time running, 35m. 58s.

December 11.—At 9 a. m., with furled sail, got temperature observations, and made a deep sea cast from a boat, when Mr. Hall got bottom at 1,370 fathoms; used two 32-pound shot, and unwaxed line. The boat took in much water, as the sea, though small, was broken.

DECEMBER 11, 1851.

Latitude 17° 34' 31" N., ⊙ m.; *longitude* 22° 50' 27" W., ⊙ a. m.

BOAT SOUNDING.—MR. HALL.

Fathoms.	Time A. M.			Intervals.	Fathoms.	Time A. M.			Intervals.
	<i>h.</i>	<i>m.</i>	<i>s.</i>	<i>m.</i> <i>s.</i>		<i>h.</i>	<i>m.</i>	<i>s.</i>	<i>m.</i> <i>s.</i>
Started...	9	28	30		800	9	41	45	2 11
100	9	29	35	1 5	900	9	44	0	2 15
200	9	30	50	1 15	1,000	9	46	29	2 29
300	9	32	18	1 28	1,100	9	49	3	2 34
400	9	33	53	1 35	1,200	9	51	49	2 46
500	9	35	36	1 43	1,300	9	54	42	2 53
600	9	37	35	1 59	1,370	9	56	52	2 10
700	9	39	34	1 59					

Bottom ; time running, 28m. 22s.

The last four casts show that we can sound whenever it is not too rough to manage a boat, and that the size of line we have will carry two 32-pound shot when free of weak places. During the last five casts the nipper bag has been dispensed with, and substituted a small smooth bull's eye held in the hand; the line would get foul in the roller of the nipper, and the nipper bag would drift off, and prevent our seeing that the line ran up and down. At 10h. 45m. a. m. discovered the island of Sal. At noon, the peak of Martinez bore S. 43° W. by the azimuth compass, mounted on its stand above the steering compass.

December 12.—At 7h. a. m. a large shole of porpoises came from the southward and westward; saw a bonita jump out of water when chased by them; they played round the brig, until one of them was struck with the harpoon and escaped, when they all left and went off to the northward and eastward—to windward. Saw quantities of flying fish, and a Danish vessel.

December 13.—At 0h. 42m. p. m. brought by the wind and furled all sail. Took temperature soundings from the brig, and a deep sea sounding from a whale boat, using unwaxed line. The sea was smooth, and the breeze (5) fresh.

DECEMBER 13, 1851.

Latitude 16° 29' 31" N., ☉ m.; *longitude* 20° 58' 1" W., ☉ $\frac{a. m.}{p. m.}$

BOAT SOUNDING.—MR. HALL.

Fathoms.	Time P. M.			Intervals.	Fathoms.	Time P. M.			Intervals.
	<i>h.</i>	<i>m.</i>	<i>s.</i>	<i>m.</i> <i>s.</i>		<i>h.</i>	<i>m.</i>	<i>s.</i>	<i>m.</i> <i>s.</i>
Started...	1	2	40		1,100	1	23	44	2 35
100	1	3	35	0 55	1,200	1	26	26	2 42
200	1	4	50	1 15	1,300	1	29	15	2 49
300	1	6	25	1 35	1,400	1	32	10	2 55
400	1	8	7	1 42	1,500	1	35	10	3 0
500	1	10	0	1 53	1,600	1	38	16	3 6
600	1	12	0	2 0	1,700	1	41	25	3 9
700	1	14	2	2 2	1,800	1	44	42	3 17
800	1	16	19	2 17	1,900	1	48	10	3 28
900	1	18	31	2 12	1,944	1	49	14	1 4
1,000	1	21	9	2 38					

Bottom; time running, 46m. 34s.

Mr. Hall reports that he was making the cast with his own hands, when the two 32-pound shot struck bottom at 1,941 fathoms; he felt it instantaneously, and that after waiting ten minutes for the boat to settle to the shot and line, he hove the log, having the oars laid in, and found the surface current, from the mean of 12 agreeing trials, to set ESE. $\frac{1}{10}$ of a knot per hour, the boat heading between N. and NNE., and the wind being NE. by E., which he thought prevented its swinging. The under currents were tried by heaving the log, having the foot square leaded block suspended at the given depth to two inflated canvas nipper bags, and the log line made fast to a stray line secured

to the block. The fishing-line cable parted before these observations were entirely completed. Though unfavorable, this has been the best day we have had for taking current observations since November 30; the observations are doubtless effected by drift, or settling of boat. No appearance of tide rips, or any disturbance or discoloration of the water [hitherto supposed to prevail hereabouts] was visible during the day.

December 14.—At 7h. 35m. a. m. saw many flying fish, and some petrel. The sea looked disturbed on its surface. At 8h. 40m. a. m. clewed up, furled, and laid to; took temperature soundings from the brig, and deep sea soundings from a boat, with the unwaxed fishing line. The transparency observed from the vessel was obtained with a 56-pound lead, and also with a foot square block leaded at the bottom; both were painted white: the former was not visible below 9, and the latter below 15 fathoms. This block, unless otherwise mentioned, was always used for obtaining the transparency. The smoothness or roughness of the sea, and the degree of whiteness of the block, the paint on which soon becomes somewhat discolored, always affects this observation.

Mr. Hall reported, on the first trial, his line parted with two shot when 600 fathoms were out.

FIRST TRIAL.

DECEMBER 14, 1851.

Latitude 16° 34' 10" N., ☉ m.; longitude 20° 47' 36" W., ☉ a. m.

BOAT SOUNDING.—MR. HALL.

Fathoms.	Time A. M.			Intervals.	Fathoms.	Time A. M.			Intervals.
	<i>h.</i>	<i>m.</i>	<i>s.</i>	<i>m.</i> <i>s.</i>		<i>h.</i>	<i>m.</i>	<i>s.</i>	<i>m.</i> <i>s.</i>
Started...	9	16	50		400	9	22	28	1 47
100	9	17	48	0 58	500	9	24	24	1 56
200	9	19	6	1 18	600	9	26	24	2 0
300	9	20	41	1 35					

Line parted; time running, 9m. 34s.; no bottom.

Hauling in the line he ascertained that a bad spot in the line had been overlooked in the recent and second examination of it.

On the second trial, with one shot, sea rough and combing, but not very high, Mr. Hall reports that he got bottom at 1,875 fathoms.

SECOND TRIAL.

DECEMBER 14, 1851.

Latitude 16° 34' 10" N., ☉ m.; *longitude* 20° 47' 36" W., ☉ a. m.

BOAT SOUNDING.—MR. HALL.

Fathoms.	Time A. M.			Intervals.	Fathoms.	Time P. M.			Intervals.
	<i>h.</i>	<i>m.</i>	<i>s.</i>	<i>m.</i> <i>s.</i>		<i>h.</i>	<i>m.</i>	<i>s.</i>	<i>m.</i> <i>s.</i>
Started...	9	45	46		1,000	10	9	30	3 20
100	9	46	44	0 58	1,100	10	13	0	3 30
200	9	48	15	1 31	1,200	10	16	35	3 35
300	9	50	4	1 49	1,300	10	20	38	4 3
400	9	52	10	2 6	1,400	10	25	0	4 22
500	9	54	30	2 20	1,500	10	29	20	4 20
600	9	57	50	3 20	1,600	10	33	41	4 21
700	9	59	50	2 0	1,700	10	38	2	4 21
800	10	2	8	2 18	1,800	10	42	30	4 28
900	10	6	10	4 2	1,875	10	45	45	3 15

Bottom ; time running, 59m. 59s.

In the afternoon, sea rough, and nothing unusual in the appearance of the water.

EMILY'S ROCK AND SHOAL.

December 15.—Sounding and searching for the Emily's Bonetta rock and shoal. On the title leaf of Laurie's Atlantic Memoir, London, 1845, this notice is given:

"A rock and shoal, in latitude 16° 59' N., longitude 21° 30' W., is stated to have been discovered by the master of the brig *Emily*, of London. This rock (which would be about 85 miles NE. of Bonavista) is stated to be about 2 feet above water, and 12 yards long, and of a gray color; the shoal extended from the rock about 2½ cables length, and one in breadth, running due east."

Supplement to the Globe, September 30, 1845:

"This would seem to be an addition to the oft repeated reports of the Bonetta rock, which have reappeared with such pertinacity as almost to lead to the belief of its existence."

At daylight one sail in sight; at 7h. 30m. a. m. took temperature soundings, having all sail furled at the time. Between 10h. a. m. and 0h. 20m. p. m. sounded along the parallel of this reported danger, passed over the position assigned it, kept a bright lookout below and aloft, with and without spy-glasses, but saw no sign of any rock or shoal. The day was clear and very favorable for this examination, and we had many good astronomical observations; all of our positions in longitude were corrected by observations made shortly afterwards at Porto Praya. These corrections threw the deep sea soundings of to-day (when Mr. Hall got bottom from a boat at 1,580 fathoms, using two 32-pound shot, and the unwaxed fishing line) to the westward of our supposed position on the alleged place of this shoal, (but our line of

soundings ran over and extended along its parallel both east and west of its assigned position.)

DECEMBER 15, 1851.

Latitude 16° 59' 0" N., ☉ m.; longitude 21° 38' 2" W., ☉ $\frac{a. m.}{p. m.}$

BOAT SOUNDING.—MR. HALL.

Fathoms.	Time P. M.			Intervals.	Fathoms.	Time P. M.			Intervals.
	<i>h.</i>	<i>m.</i>	<i>s.</i>	<i>m.</i> <i>s.</i>		<i>h.</i>	<i>m.</i>	<i>s.</i>	<i>m.</i> <i>s.</i>
Started...	12	42	39		900	12	58	53	2 18
100	12	43	34	0 55	1,000	1	1	20	2 27
200	12	44	50	1 16	1,100	1	4	2	2 42
300	12	46	20	1 30	1,200	1	6	42	2 40
400	12	48	0	1 40	1,300	1	9	28	2 46
500	12	50	14	2 14	1,400	1	12	19	2 51
600	12	52	0	1 46	1,500	1	15	19	3 0
700	12	54	16	2 16	1,580	1	18	0	2 41
800	12	56	35	2 19					

Bottom ; time running, 35m. 21s.

We were then running by the mean of the three chronometers, which appeared (chiefly from the distant bearing we had of Martinez peak on the 11th) to be most correct. The mean of our five chronometers, by which our positions previously had been determined, proved to be but slightly in error on the meridian of Porto Praya, being but 1' 51" of arc too far west—the proportion of which correction has been applied to our results given in the accompanying abstract log, from the mean of all the chronometers.

When the sounding was made, and the boat settled to leeward, the cross sea soon broke the line. The contract line with which we sound, furnished at New York, has many bad places in it, requiring very careful and tedious overhauling, and then it is often impossible to detect all the bad places. The defective quality of our line has caused the loss of many shot, and many failures in getting soundings.

December 16.—At 6h. a. m., with sails furled, took temperature soundings from the brig, and got bottom from a boat, (Mr. Hall,) at 1,220 fathoms, on the second trial, the line having parted on the first trial at 700 fathoms: used two 32-pound shot, unwaxed line, on each occasion.

FIRST TRIAL.

DECEMBER 16, 1851.

Latitude 15° 24' 8" N., ☉ m.; longitude 21° 46' 48" W., ☉ a. m.

BOAT SOUNDING.—MR. HALL.

Fathoms.	Time A. M.			Intervals.	Fathoms.	Time A. M.			Intervals.
	<i>h.</i>	<i>m.</i>	<i>s.</i>	<i>m.</i> <i>s.</i>		<i>h.</i>	<i>m.</i>	<i>s.</i>	<i>m.</i> <i>s.</i>
Started...	6	45	54		400	6	51	12	1 17
100	6	46	52	0 58	500	6	53	10	1 58
200	6	48	6	1 14	600	6	55	13	2 3
300	6	49	55	1 49	700	6	57	20	2 7

Line parted; time running, 11m. 26s.; no bottom.

SECOND TRIAL.

DECEMBER 16, 1851.

Latitude 15° 24' 8" N., ☉ m.; longitude 21° 46' 48" W., ☉ a. m.

BOAT SOUNDING.—MR. HALL.

Fathoms.	Time A. M.			Intervals.	Fathoms.	Time A. M.			Intervals.
	<i>h.</i>	<i>m.</i>	<i>s.</i>	<i>m.</i> <i>s.</i>		<i>h.</i>	<i>m.</i>	<i>s.</i>	<i>m.</i> <i>s.</i>
Started...	7	15	53		700	7	27	54	2 42
100	7	16	12	0 19?	800	7	29	10	1 16
200	7	17	22	1 10	900	7	31	32	2 22
300	7	18	46	1 24	1,000	7	34	5	2 33
400	7	20	27	1 41	1,100	7	36	44	2 39
500	7	23	15	2 48	1,200	7	39	23	2 39
600	7	25	12	1 57	1,220	7	40	0	0 37

Bottom; time running, 24m. 7s.

Saw a great many flying fish. At 4h. 30m. p. m. again furled sail, and took temperatures, and Mr. Hall got bottom from a boat at 1,380 fathoms, with one 32-pound shot, unwaxed line.

DECEMBER 16, 1851.

Latitude 15° 09' 20" N., ☉ m.; longitude 22° 28' 48" W., ☉ p. m.

BOAT SOUNDING.—MR. HALL.

Fathoms.	Time P. M.			Intervals.	Fathoms.	Time P. M.			Intervals.
	<i>h.</i>	<i>m.</i>	<i>s.</i>	<i>m.</i> <i>s.</i>		<i>h.</i>	<i>m.</i>	<i>s.</i>	<i>m.</i> <i>s.</i>
Started...	4	45	6		800	5	2	45	3 0
100	4	46	10	1 4	900	5	5	55	3 10
200	4	47	52	1 42	1,000	5	9	10	3 15
300	4	49	45	1 53	1,100	5	12	29	3 19
400	4	52	0	2 15	1,200	5	16	0	3 31
500	4	54	26	2 26	1,300	5	19	39	3 39
600	4	57	5	2 39	1,380	5	22	50	3 11
700	4	59	45	2 40					

Bottom ; time running, 37m. 44s.

The surface current, from six trials with the boat anchored by this long cable, appeared to set WSW. $\frac{8}{10}$ knot per hour; the sea was tolerably smooth and breeze moderate (4); the result is not reliable, from the obvious instability of the assumed stationary point, the boat. Bent the cables under short sail during the night.

December 17.—At daylight saw the island of Mayo ; made sail. At 7h. 35m. a. m. furled sail, took temperatures from brig, and got bottom from boat (Mr. Hall) at 1,120 fathoms, with one 32-pound shot, unwaxed line.

DECEMBER 17, 1851.

Latitude 15° 08' 0" N., ☉ m.; longitude 22° 56' 57" W., ☉ a. m.

BOAT SOUNDING.—MR. HALL.

Fathoms.	Time A. M.			Intervals.	Fathoms.	Time A. M.			Intervals..
	<i>h.</i>	<i>m.</i>	<i>s.</i>	<i>m.</i> <i>s.</i>		<i>h.</i>	<i>m.</i>	<i>s.</i>	<i>m.</i> <i>s.</i>
Started...	8	16	54		700	8	32	47	2 52
100	8	17	55	1 1	800	8	35	4	2 17
200	8	21	0	3 5	900	8	38	13	3 9
300	8	22	55	1 55	1,000	8	41	52	3 39
400	8	25	0	2 5	1,100	8	45	20	3 28
500	8	27	22	2 22	1,120	8	46	0	0 40
600	8	29	55	2 33					

Bottom ; time running, 29m. 6s.

At noon, saw two sail at anchor in English Harbor. At 0h. 30m. p. m., between Mayo and St. Iago, furled sail, tried temperatures, and Mr. Hall got bottom from a boat at 790 fathoms, using unwaxed line and two 32-pound shot.

DECEMBER 17, 1851.

Latitude 15° 02' 57" ☉ N., m.; longitude 23° 12' 51" W., ☉ a. m.

BOAT SOUNDING.—MR. HALL.

Fathoms.	Time P. M.			Intervals.	Fathoms.	Time P. M.			Intervals.
	<i>h.</i>	<i>m.</i>	<i>s.</i>	<i>m.</i> <i>s.</i>		<i>h.</i>	<i>m.</i>	<i>s.</i>	<i>m.</i> <i>s.</i>
Started...	12	53	26		500	1	0	35	1 50
100	0	0	0	0 0	600	1	2	34	1 59
200	12	55	38	2 12	700	1	4	44	2 10
300	12	57	8	1 30	790	1	6	35	1 51
400	12	58	45	1 37					

Bottom ; time running, 13*m.* 9*s.*

At 4*h.* 17*m.* p. m. anchored at Porto Praya in 7½ fathoms water, sandy bottom, with 35 fathoms chain, after a boisterous and laborious surveying cruise of 71 days from Sandy Hook.

We are gratified to find that the Germantown, Captain Nicholas, (the flag-ship of Commodore Lavalette, commanding the African squadron;) the John Adams, Captain Barron; the Dale, Captain Pearson; and the Porpoise, Captain Lardner, are here, and the store ship, just arrived from the United States, from which we are to draw supplies. Several whale ships recently arrived here from the United States, complain much of the severely bad weather they encountered.

CHAPTER III.

Rate the chronometers—Sickness at Porto Praya—Receive wood, water, provisions, and stores—Growing importance of the Cape de Verde islands to commerce—Leave Porto Praya—Touch at Brava—Slave vessel—Current bottles—The NE. trades die out on the parallel mentioned by Lieutenant Maury—Unsuccessful search for French shoals—Luminous sea resembling shoals—Pandora's sounding—Doubtful sounding by Captain Denham, R. N.—Wire unfit for sounding—Sounding with small waxed fishing line from a boat kept over the lead recommended—Take many deep sea soundings.

At anchor in Porto Praya, St. Iago, Cape de Verde islands, from December 18, 1851, to January 2, 1852.

Mr. Barbot, (the master,) aided by Mr. Mayo, determined the error and rates of the chronometers, by observations of the sun, with sextant and artificial horizon on the beach at the landing on the northern part of Quail island, in this harbor, in latitude $14^{\circ} 54'$ N., and longitude $23^{\circ} 30' 45''$ W. The mean of our five chronometers, brought forward by their errors and rates ascertained at New York, gave the longitude of Quail island $1^{\circ} 51' \frac{37}{100}$ in arc west of the above determination given by Lieutenant Raper, R. N., in his admirable work on navigation. Adopting Lieutenant Raper's determination, a correction has been applied to the determinations made during the cruize from New York here. The observations made here for determining the deviation of the compasses were not satisfactory, as the fresh and flawy breeze from over the heights, under which the vessel is anchored, made it impossible to steady her head, and the bad holding ground occasioned dragging when riding at short scope, though with both anchors down.

The Germantown's launch, manned by kroomen, (sometimes written crewmen,) delivered our wood, water, provisions, and stores. This judicious arrangement of Commodore Lavalette's caused the Dolphin to leave port with a healthy crew to encounter the exposure before us. Each man-of-war, of the African squadron, is allowed to ship a few of these kroomen on the coast, a hardy, obliging, and temperate set of negroes, who do all the drudgery of boat duty whilst the vessel is on the coast, and rejoice in the navy ration and pay they receive for services, which, by preventing the exposure of our men, preserves their health.

The sickness here, from which there is now a good deal of mortality, resembles the coast fever.

By a general order of the squadron, all officers are prevented from staying on shore after sunset; and the crews of our public vessels are not allowed to go on shore to frolic. A disregard of these precautions had introduced the fever on board of some of our cruizers, and occasioned considerable loss of life.

Money was issued to the Dolphin's crew, which enabled them to enjoy a good Christmas dinner on board, and to procure some luxuries to take to sea with them. Two of our men, inflamed by their Christmas frolic, and the liquor then smuggled on board, deserted that night with our little metallic life-boat, and were observed the next morning going to leeward, towards Fogo island.

Procured some live stock, fruit, &c., for issue to the crew.

The Island of St. Iago is high, rugged, and volcanic; it is barren, except in the valleys, where fruit, vegetables, and live stock are raised in quantities sufficient for the wants of vessels touching here occasionally for such supplies. This island affords no firewood; that which we got was brought up in the United States ship Dale from Liberia. The water is tolerably good, and is delivered through pipes at the beach for half a cent per gallon; the kroomen float it off in casks through the surf. The harbor is not spacious, and the holding ground is not good, being of the consistency of sand and ashes. A dry haze hangs over the island, and the dust from its high, dry, and naked hills, fills the atmosphere and lands on board.

Porto Grande, St. Vincent's island, is esteemed the best bay in this group of islands; it is deficient in water. The English mail steamer, running between Southampton and Brazil, has a coal depot there, and from recent causes of increased exposure, there is now much mortality among the inhabitants, though the place was previously considered remarkable for its salubrity. At Terrafal bay, St. Antonio island, it is reported that there is plenty of water and some wood. The soundings extend one-third of a mile from shore, from 40 fathoms at the edge of the bank, to 20 fathoms within three-fourths of a cable's length of the surf. This group of islands is of growing importance to cominerce.

January 3.—Having rated the chronometers and filled up with provisions and water, got underway to resume the duty of the cruize, having received much professional assistance and personal kindness from our brother officers of the African squadron, whilst at Porto Praya. When leaving the harbor a vessel coming in, and just from Fogo island, informed us that our metallic life-boat was in the hands of the custom-house officers there. At noon furled sail, took temperature soundings, and made three casts for deep sea soundings from a boat, but the line parted at 500, and again at 680 fathoms, and there was no more on the reel when 900 fathoms were run out on the third trial; used unwaxed line, two 32-pound shot the first, and one on the second and third trials.

FIRST TRIAL.

JANUARY 3, 1852.

Latitude $14^{\circ} 45' 55''$ N., \odot m.; *longitude* $23^{\circ} 50' 24''$ W., \odot $\frac{a. m.}{p. m.}$

BOAT SOUNDING.—MR. RENSHAW.

Fathoms.	Time P. M.			Intervals.	Fathoms.	Time P. M.			Intervals.
	<i>h.</i>	<i>m.</i>	<i>s.</i>	<i>m.</i> <i>s.</i>		<i>h.</i>	<i>m.</i>	<i>s.</i>	<i>m.</i> <i>s.</i>
Started...	12	36	10		400	12	41	10	1 31
100	12	37	8	58	500	12	42	55	1 45
200	12	38	16	1 08	600	12	44	44	1 49
300	12	39	39	1 23	680	12	46	03	1 19

Line parted; time running, 9m. 53s.; no bottom.

THIRD TRIAL.

Fathoms.	Time P. M.			Intervals.	Fathoms.	Time P. M.			Intervals.
	<i>h.</i>	<i>m.</i>	<i>s.</i>	<i>m.</i> <i>s.</i>		<i>h.</i>	<i>m.</i>	<i>s.</i>	<i>m.</i> <i>s.</i>
Started...	1	38	07		500	1	47	47	3 34
100	1	39	05	0 58	600	1	51	29	3 42
200	1	40	27	1 22	700	1	54	21	2 52
300	1	42	13	1 46	800	1	57	28	3 7
400	1	44	13	2 0	900	1	59	40	2 12

Line parted ; time running, 21m. 33s. ; no bottom.

We had been obliged, at New York, to take the line which the contractors furnished, most of which was very defective, rather than wait for months to get more.

January 4, (Sunday.)—Called all hands, mustered the crew, and Mr. Danels read the articles of war to the officers and men. Off the small town of Luz, at mid-day, sent Mr. Hall to wait on the authorities and recover our boat; he returned with it, and with protests made by our deserters [who are now on the island of Brava opposite] before the United States consular agent, who is a native, in which they made oath that they were not American citizens; that they had come a long way by sea in so small a boat, because, whilst they had been sent below to stop a leak in a sinking American merchant vessel, to which they belonged, the captain and mate had taken the long boat and pushed off with their effects, leaving them to their fate. The object of this false swearing was probably to prevent arrest, on suspicion of being deserters from our squadron at Porto Praya.

This island is one volcanic mountain, rising some 9,700 feet above the sea, and ending in a peak with a crater at the top of it, the eruptions from which have sometimes driven off the inhabitants. We saw many small craters on the southern and eastern sides, which are barren, and deep cut with gullies made by the lava. The western side is cultivated around to the northward of the village of Luz. Some live stock, fruit, and vegetables may be got. The open anchorage and landing are both bad, and water is scarce.

January 5.—Laid to last night between Fogo and Brava; at 7 a. m. hove to off *Oven* harbor, a small cove on the northeast side of the island of Brava, where Lieutenant Commanding Lee, Dr. Gould, and Mr. Mayo landed; they found a Portugese brig of war, secured with hawsers, behind the large rock forming *Oven* harbor, with a Brazilian slave prize recently seized at St. Iago, a beautiful model, (Baltimore clipper built,) which the man-of-war has come to conduct to Lisbon. Mounted on horses and mules we climbed this steep and rugged island, to the small but beautiful level near its top, which is backed by lofty and well cultivated heights. On this picturesque spot the governor general of the Cape de Verde islands, Don Fortunato José Barreiros, brigadier in the Portugese army, resides, surrounded by neighbors with good farms and handsome gardens, abounding in tropical trees and fruits. Breakfasted with the governor and his family at noon, and were regaled with some delicious coffee, the growth of this island. Learned from the gov-

error that the crater of Fogo, in full view before him, had not emitted anything but smoke since 1847. Thanked the governor for the compliment he had shown to our flag in having our men fed by the brig-of-war in the harbor, upon their report that they were just from a foundering American merchant vessel, but desired him to take no further care of them, as they were deserters from our vessel, had just fled from the harbor on our approach to it, and had recently voluntarily sworn that they were not American citizens. The acting consular agent here, also a native, said he had previously heard of their deposition at Luz, and would not now put the United States to any expense on their account.

There is probably no branch of our public expenditure which is more impolitic and unnecessary than the growing appropriation for the relief of the so-called "destitute American seamen abroad." It is an encouragement to bad masters to persecute and drive off good seamen, shipped at high wages, with money due them, which they forfeit, by the desertion, to owners, when substitutes can be got; or it is an inducement to sailors to quit, and thus cripple a vessel, and sacrifice their wages for a frolic, then to receive relief from the United States by a neighboring consul imposed upon with a tale of distress; it is an encouragement to that class of consular agents who are actively engaged, or individually interested in commercial houses, to wink at the oppression practised by some merchant captains upon their crews, and at the abuse of bringing out sick relatives or friends for the benefit of a sea voyage, to be cared for and returned at the expense of the government; and is an inducement to that other and numerous host of foreigners, acting as agents to consuls, to construct cases and expenses which never occurred. Let merchant owners and masters on the one hand, and merchant seamen on the other, be regarded only as other Americans engaged in business abroad, receiving neither more nor less protection and provision from our government, and leaving employers and the employed to make their own bargains with each other, the fulfilment of which they have legal means of enforcing.

Fruits and vegetables, especially pumpkins, which keep well, seemed plentiful here, and at reasonable prices. Wood and water were scarce. This island is considered very healthy; it must be a preferable residence to St. Iago. At 4 p. m. we returned on board, and made sail on our course. At 6h. 10m. p. m. the wind became flawy and baffling, as we passed from under the lee of Fogo island. Observed an appearance on the water resembling a tide rip, or a line of surf; it was occasioned by a ray of light from the moon showing through an opening in a cloud. A "vigia" maker would have reported a reef or shoal here.

January 6.—At 10h. 40m. a. m. took temperature soundings with furled sails; Mr. Hall attempted a deep sea cast from a boat, with unwaxed line and two 32-pound shot, but the line parted at 680 fathoms.

JANUARY 6, 1852.

Latitude 13° 1' 30" N., ☉ m.; longitude 22° 57' 42" W., ☉ $\frac{a. m.}{p. m.}$

BOAT SOUNDING.—MR. HALL.

Fathoms.	Time A. M.			Intervals.	Fathoms.	Time A. M.			Intervals.
	<i>h.</i>	<i>m.</i>	<i>s.</i>	<i>m.</i> <i>s.</i>		<i>h.</i>	<i>m.</i>	<i>s.</i>	<i>m.</i> <i>s.</i>
Started...	11	2	45		400	11	7	30	1 30
100	11	3	37	0 52	500	11	9	10	1 40
200	11	4	42	1 5	600	11	10	55	1 45
300	11	6	0	1 18	680	11	12	0	1 5

Line parted ; time running, 9m. 15s. ; no bottom.

Sea rough, with some high combers. The deep sea lines used in taking temperatures came up with much inclination ; there will always be some drift when brought by the wind with sails furled, yards square, and helm down, except when it is calm and smooth, and there is no current, a rare condition. This observation, therefore, can best be made when cylinders are to be used instead of self-registering metallic thermometers, by means of a boat where the line can be kept perpendicular with the oars. This sounding would require a separate boat, and the main difficulty with us would have been from the want of men enough, in a five-oared whale boat, to haul in a stout deep sea line, lead, and cylinder, quickly, so as to give the temperature of water in the cylinder as little affected as possible by that through which it had passed, whilst having at least two oars manned to keep the boat over the line, and give the true depth of the observation. In the boat the motion would open the valves of the cylinder, except when the sea is perfectly smooth. [The very inaccurate and contradictory deep sea temperatures obtained with the self-registering fluid thermometer, (enclosed in a glass globe,) used in the United States surveying brig Washington, in 1847, caused me, then commanding that vessel, to urge the adoption of the self-registering metallic thermometer ; unfortunately, none of these could be obtained for the present cruize.]

January 7.—Observed a total eclipse of the moon. At 6 a. m. furled sail, took temperature soundings, and Mr. Danels made two casts, each with two 32-pound shot and the same sized fishing line, unwaxed. The line, which was running well, stopped at 1,160 fathoms the first cast, and 1,120 fathoms the second.

FIRST CAST.

JANUARY 7, 1852.

Latitude 11° 7' 15" N., ☉ m.; longitude 21° 56' 54" W., ☉ a. m.

BOAT SOUNDING.—MR. HALL.

Fathoms.	Time A. M.			Intervals.	Fathoms.	Time A. M.			Intervals.
	<i>h.</i>	<i>m.</i>	<i>s.</i>	<i>m.</i> <i>s.</i>		<i>h.</i>	<i>m.</i>	<i>s.</i>	<i>m.</i> <i>s.</i>
Started...	6	33	54		700	6	44	29	1 52
100	6	35	10	1 16	800	6	46	27	1 58
200	6	36	20	1 10	900	6	48	35	2 8
300	6	37	38	1 18	1,000	6	50	50	2 15
400	6	39	10	1 32	1,100	6	53	16	2 26
500	6	40	50	1 40	1,600	6	55	0	1 44
600	6	42	37	1 47					

Bottom ; time running, 21m. 6s.

SECOND CAST.

Fathoms.	Time A. M.			Intervals.	Fathoms.	Time A. M.			Intervals.
	<i>h.</i>	<i>m.</i>	<i>s.</i>	<i>m.</i> <i>s.</i>		<i>h.</i>	<i>m.</i>	<i>s.</i>	<i>m.</i> <i>s.</i>
Started...	7	7	53		700	7	17	25	1 53
100	7	8	39	46	800	7	19	23	1 58
200	7	9	40	1 1	900	7	21	33	2 10
300	7	10	55	1 15	1,000	7	23	47	2 14
400	7	12	20	1 25	1,100	7	26	11	2 24
500	7	13	50	1 30	1,120	7	27	0	49
600	7	15	32	1 42					

Bottom ; time running, 19m. 7s.

Mr. Danels believed the shot was on the bottom the first cast, and made the second to verify it; in this sort of sounding the same extent of line would hardly show bottom twice. There must always be a little difference in so deep a cast with the boat not fixed; and this kind of line can only be true as to length within certain limits. The discrepancy here is a confirmation.

At 2 p. m. threw overboard a dry and sealed bottle painted white, and containing a paper with our position at noon. This paper was folded and attached to a piece of small twine led out by the cork, so that by drawing the cork it could be taken out, read, and replaced, without breaking the bottle. On the paper was a request to persons picking the bottle up at sea, to endorse when, where, and by whom picked up; then to put it back and reseal, and return the bottle to the sea, and give public notice thereof. Also urging those picking up the bottle on shore to endorse on it when, where, and by whom this was done, and forward the paper in it to Lieutenant M. F. Maury, superintendent of the naval observatory, under cover to the Secretary of the Navy, Washington, U. S. A bottle was in like manner regularly

thrown overboard every day thereafter, until our return to the United States, except, that after the 17th instant, the bottles instead of being painted white, (which might wash off,) were covered with light, white, canvas, to protect and show them.

January 8.—Clewed up, rounded to, took in patent log, lowered a boat to sound, furled sail, squared yards, and took temperature soundings from the brig. This was the usual course, the statement of which will generally be omitted hereafter, unless where the operation was differently performed. Mr. Renshaw thought he got bottom at 2,270 fathoms; he then parted the line, it being too rough to try current observations: he used one 32-pound shot, and doubled the line (which was unwaxed) for the first 100 fathoms. This sounding was made in a moderate trade wind, (3) sea not high, but somewhat irregular on the surface.

JANUARY 8, 1852.

Latitude 8° 43' 0" N., ☉ *m.*; *longitude* 20° 52' 0" W., ☉ $\frac{a. m.}{p. m.}$

BOAT SOUNDING.—MR. DANELS.

Fathoms.	Time A. M.			Intervals.	Fathoms.	Time A. M.			Intervals.
	<i>h.</i>	<i>m.</i>	<i>s.</i>	<i>m.</i> <i>s.</i>		<i>h.</i>	<i>m.</i>	<i>s.</i>	<i>m.</i> <i>s.</i>
Started...	9	42	55		1,200	10	13	15	3 44
100	9	43	57	1 2	1,300	10	16	52	3 37
200	9	45	25	1 28	1,400	10	20	50	3 58
300	9	47	12	1 47	1,500	10	25	5	4 15
400	9	49	20	2 8	1,600	10	29	16	4 11
500	9	51	39	2 19	1,700	10	33	50	4 34
600	9	54	8	2 29	1,800	10	38	22	4 32
700	9	56	58	2 50	1,900	10	42	54	4 32
800	9	59	48	2 50	2,000	10	47	22	4 28
900	10	2	40	2 52	2,100	10	51	56	4 34
1,000	10	6	8	3 28	2,200	10	56	45	4 49
1,100	10	9	31	3 23	2,290	11	4	15	7 30

Line stopped, 1*h.* 21*m.* 20*s.*; bottom at 2,270, in 1*h.* 19*m.* 50*s.*

Ascertained, by heaving the log from the boat on her return, that the brig had drifted one knot SW. by W. in two hours.

January 9.—At 6 a. m. took temperature soundings, and made three casts with unwaxed fishing line from a boat; swell about 11 feet, surface water moderately ruffled.

1st, by Mr. Renshaw, who got bottom at 2,050 fathoms with one shot. [The line ran very slowly during the last 100 fathoms.]

FIRST TRIAL.

JANUARY 9, 1852.

Latitude 7° 17' 0" N., ☉ m.; longitude 20° 7' 0" W., ☉ a. m.

BOAT SOUNDING.—MR. RENSHAW.

Fathoms.	Time A. M.			Intervals.	Fathoms.	Time A. M.			Intervals.
	<i>h.</i>	<i>m.</i>	<i>s.</i>	<i>m.</i> <i>s.</i>		<i>h.</i>	<i>m.</i>	<i>s.</i>	<i>m.</i> <i>s.</i>
Started...	6	6	7		1,200	6	36	41	3 33
100	6	7	20	1 13	1,300	6	40	23	3 42
200	6	8	52	1 32	1,400	6	44	8	3 45
300	6	10	40	1 48	1,500	6	48	18	4 0
400	6	12	45	2 5	1,600	6	52	24	4 16
500	6	15	7	2 22	1,700	6	56	33	4 9
600	6	17	24	2 17	1,800	7	0	56	4 23
700	6	20	16	2 52	1,900	7	5	30	4 34
800	6	23	13	2 57	2,000	7	10	14	4 44
900	6	26	30	3 17	2,100	7	18	37	8 23
1,000	6	29	37	3 7	2,170	7	25	32	6 55
1,100	6	33	8	3 31					

Line stopped, 1*h.* 19*m.* 25*s.*; bottom about 2,050, in 1*h.* 8*m.* 25*s.*

Held on by the line and tried surface currents; (boat heading WNW., light breeze (2) from the ENE. ;) found it by three trials to set N. by W. $\frac{1}{10}$ knot per hour. At 9 a. m. Mr. Hall left to use two shot, and verify the above sounding; but an English brig, supposing he was out to board her, came so near the boat as to oblige him to change his position, in doing which the line parted.

SECOND TRIAL.

JANUARY 9, 1852.

Latitude 7° 17' 0" N., ☉ m.; longitude 20° 7' 0" W., ☉ a. m.

BOAT SOUNDING.—MR. HALL.

Fathoms.	Time A. M.			Intervals.	Fathoms.	Time A. M.			Intervals.
	<i>h.</i>	<i>m.</i>	<i>s.</i>	<i>m.</i> <i>s.</i>		<i>h.</i>	<i>m.</i>	<i>s.</i>	<i>m.</i> <i>s.</i>
Started...	8	54	43		500	9	0	53	1 34
100	8	55	34	0 51	600	9	2	36	1 43
200	8	56	36	1 2	700	9	4	30	1 54
300	8	57	52	1 16	800	9	6	31	2 1
400	8	59	19	1 27	890	9	8	45	2 14

Line parted; time running, 14*m.* 2*s.*; no bottom.

At 10 a. m. Mr. Renshaw left the vessel, and sounded with two 32-pound shot. Circumstances same as in the morning, and got bottom at 1,940 fathoms: "The line," he says, "brought up so suddenly as to leave no doubt of its having reached the bottom."

THIRD TRIAL.
JANUARY 9, 1852.

Latitude 7° 17' 0" N., ☉ m.; longitude 20° 7' 0" W., ☉ a. m.

BOAT SOUNDING.—MR. RENSHAW.

Fathoms.	Time A. M.			Intervals.	Fathoms.	Time A. M.			Intervals.
	<i>h.</i>	<i>m.</i>	<i>s.</i>	<i>m.</i> <i>s.</i>		<i>h.</i>	<i>m.</i>	<i>s.</i>	<i>m.</i> <i>s.</i>
Started...	10	0	2		1,100	10	19	35	2 31
100	10	1	0	0 58	1,200	10	22	13	2 38
200	10	2	4	1 4	1,300	10	25	0	2 47
300	10	3	23	1 19	1,400	10	27	58	2 58
400	10	4	56	1 33	1,500	10	30	55	2 57
500	10	6	37	1 41	1,600	10	33	55	3 0
600	10	8	25	1 48	1,700	10	37	8	3 13
700	10	10	20	1 55	1,800	10	40	18	3 10
800	10	12	30	2 10	1,900	10	43	35	3 17
900	10	14	43	2 13	1,940	10	45	15	1 40
1,000	10	17	4	2 21					

Bottom ; time running, 45m. 13s.

The two shot appear to have carried the line down straighter and quicker, and got bottom with less line. The last 170 fathoms of the first cast, with one shot, took 15m. 18s., when the preceding 100 fathoms, at 2,000 fathoms, took less than 5m. In the last cast the last hundred (two shot) took 3m. 17s.; it is probable that the single shot reached the bottom soon after the 2,000 fathoms were out, or whilst the next 100 fathoms were paid out. Saw two sail to-day.

January 10.—At 3h. 30m. p. m. took temperature soundings from the brig, and deep sea soundings from boat. Mr. Danels reported, that at the first cast with one shot, the line [unwaxed] stopped running when 2,019 fathoms were out, and on hauling upon it found that it had parted at a great depth.

FIRST TRIAL.
JANUARY 10, 1852.

Latitude 5° 36' 30" N., ☉ m.; longitude 19° 34' 46" W., ☉ p. m.

BOAT SOUNDING.—MR. DANELS.

Fathoms.	Time P. M.			Intervals.	Fathoms.	Time P. M.			Intervals.
	<i>h.</i>	<i>m.</i>	<i>s.</i>	<i>m.</i> <i>s.</i>		<i>h.</i>	<i>m.</i>	<i>s.</i>	<i>m.</i> <i>s.</i>
Started...	3	24	0		1,100	3	51	10	3 25
100	3	24	58	0 58	1,200	3	54	42	3 32
200	3	26	36	1 38	1,300	3	58	20	3 38
300	3	28	26	1 50	1,400	4	02	08	3 48
400	3	30	32	2 6	1,500	4	06	09	4 1
500	3	32	53	2 21	1,600	4	10	17	4 8
600	3	35	28	2 35	1,700	4	14	45	4 28
700	3	38	13	2 45	1,800	4	18	59	4 14
800	3	41	11	2 58	1,900	4	22	43	3 44
900	3	44	20	3 9	2,000	4	29	23	6 40
1,000	3	47	45	3 25	2,019	4	30	05	0 42

Bottom probable ; time running, 1h. 6m. 5s.

JANUARY 11, 1852.

Latitude 4° 27' 0" N., ☉ *m.*; *longitude* 19° 21' 15" W., ☉ *p. m.*

BOAT SOUNDING.—MR. RENSHAW.

Fathoms.	Time P. M.			Intervals.	Fathoms.	Time P. M.			Intervals.
	<i>h.</i>	<i>m.</i>	<i>s.</i>	<i>m.</i> <i>s.</i>		<i>h.</i>	<i>m.</i>	<i>s.</i>	<i>m.</i> <i>s.</i>
Started...	4	3	13		1,400	4	30	1	2 51
100	4	4	3	0 50	1,500	4	32	57	2 56
200	4	4	40	0 37	1,600	4	35	57	3 0
300	4	5	54	1 14	1,700	4	39	10	3 13
400	4	7	24	1 30	1,800	4	42	22	3 12
500	4	9	4	1 40	1,900	4	45	46	3 24
600	4	10	50	1 46	2,000	4	49	15	3 29
700	4	12	49	1 59	2,100	4	52	44	3 29
800	4	14	52	2 3	2,200	4	56	20	3 36
900	4	17	6	2 14	2,300	5	0	0	3 40
1,000	4	19	26	2 20	2,400	5	3	40	3 40
1,100	4	21	55	2 29	2,500	5	7	37	3 57
1,200	4	24	31	2 36	2,540	5	9	20	1 43
1,300	4	27	10	2 39					

Bottom probable ; time running, 1*h.* 6*m.* 7*s.*

January 12.—The trade wind on the 9th, which was light from ENE. in 7° N. and 20° W., became variable between NNE. and ENE. the next day; and when we had run a degree more to the southward, became very light and more variable on the following day in 5° N., and after hauling N., and even NNW., died out on the 12th in 4° 05' N. and 19° 15' W., 15 or 20 twenty miles north of Maury's mean average limit for the month of January.

Saw a whale and several sail. At 3*h.* 30*m.* *p. m.* took temperatures from brig, and a deep sea sounding, (using two 32-pound shot, unwaxed line,) and current observations from boat. Mr. Danels reports that the line parted when 2,125 fathoms were out, and judging from the strain upon it he thinks that the fracture must have been at a very great depth; a small swivel was used just above the shot, but the line would twist before the swivel would turn. Holding on to the line, and heaving the light log, he tried surface and under currents. When this cast was made it was "almost calm, swell about 7 feet, but slightly ruffled on the surface."

JANUARY 12, 1852.

Latitude 4° 5' 10'' N., ☉ m.; longitude 19° 15' 28'' W., ☉ a. m.

BOAT SOUNDING.—MR. DANELS.

Fathoms.	Time P. M.			Intervals.	Fathoms.	Time P. M.			Intervals.
	<i>h.</i>	<i>m.</i>	<i>s.</i>	<i>m.</i> <i>s.</i>		<i>h.</i>	<i>m.</i>	<i>s.</i>	<i>m.</i> <i>s.</i>
Started...	3	26	34		1,200	3	42	23	1 44
100	3	27	19	0 45	1,300	3	44	10	1 47
200	3	28	13	0 54	1,400	3	45	58	1 48
300	3	29	15	1 2	1,500	3	47	50	1 52
400	3	30	22	1 7	1,600	3	49	47	1 57
500	2	31	35	1 13	1,700	3	51	43	1 56
600	3	32	54	1 19	1,800	3	53	47	2 4
700	3	34	19	1 25	1,900	3	55	54	2 7
800	3	35	47	1 28	2,000	3	58	04	2 10
900	3	37	23	1 36	2,100	4	0	19	2 15
1,000	3	38	58	1 35	2,125	4	0	55	0 36
1,100	3	40	39	1 41					

Probable bottom ; time running, 34m. 21s.

The current found is the mean of two trials after the cast had been made, and when the boat was riding to the sounding line, upon which there was a good strain; the boat was heading to the light air from north. The boat was gone $1\frac{1}{2}$ hours, and pulled, by her log, one mile S. $\frac{1}{2}$ W. to rejoin the brig.

It is difficult to tell the difference between striking the bottom and the parting of the line at a great depth; when the line runs well until it stops suddenly, and you can then get but little of it in when hauling on it, the inference is that the shot has struck the bottom. If the observation is repeated with a heavier weight, (which will sink the line more rapidly, and keep it straighter than before,) and the line stops running at about the same depth as before, the previous sounding is verified. It is highly probable that bottom was got to-day at 2,125 fathoms, as the line ran wonderfully well, to a heavy weight, in a smooth sea and light air, and preserved a great strain.

FRENCH SHOAL.

January 13.—At 1 p. m. we were by dead reckoning from yesterday over one of the positions assigned to French shoal. This shoal is thus mentioned on p. 309 of Laurie's *Memoir of the Atlantic*, London, 1829:

"French shoal, in latitude 4° 5' N., longitude 20° 35' W. This shoal has been described as three leagues in circumference and even with the water's edge. It is stated to have been seen by several French East India ships, and placed by the French hydrographers in latitude 4° 15' N., longitude 19° 20' W.; the late Spanish chart states it to have been seen in 1796, and a modern English chart exhibits it in latitude 4° 05' N. and longitude 20° 35', the position we have adopted."

The above old and loose account is all the authority given in support of the existence of this shoal. It was unsuccessfully searched for, both in the English and French positions, by the United States explor-

ing squadron in 1838, and it has been omitted by Laurie from his Atlantic Memoir of 1845.

Took temperature soundings from the brig, with the sails clewed up but not furled. The sea was smooth, with a light surface swell, light airs (1). Mr. Renshaw made a deep sea cast from a boat, with unwaxed fishing line and one 32-pound shot, and thinks he got bottom at 2,670 fathoms, and then made current observations.

JANUARY 13, 1852.

Latitude 4° 14' 21" N., D. R.; *longitude* 19° 20' 20" W., D. R.

BOAT SOUNDING.—MR. RENSHAW.

Fathoms.	Time P. M.			Intervals.	Fathoms.	Time P. M.			Intervals.
	<i>h.</i>	<i>m.</i>	<i>s.</i>	<i>m.</i> <i>s.</i>		<i>h.</i>	<i>m.</i>	<i>s.</i>	<i>m.</i> <i>s.</i>
Started...	12	54	14		1,500	1	35	22	4 4
100	12	55	19	1 5	1,600	1	39	26	4 4
200	12	56	44	1 25	1,700	1	43	40	4 14
300	12	58	24	1 40	1,800	1	47	59	4 19
400	1	0	11	1 47	1,900	1	52	28	4 29
500	1	2	22	2 11	2,000	1	57	13	4 45
600	1	4	54	2 32	2,100	2	1	57	4 44
700	1	7	33	2 39	2,200	2	6	46	4 49
800	1	10	27	2 54	2,300	2	11	36	4 50
900	1	13	35	3 8	2,400	2	16	43	5 7
1,000	1	16	44	3 9	2,500	2	21	51	5 8
1,100	1	20	11	3 27	2,550	*2	24	45	2 54
1,200	1	23	46	3 35		†3	6	11	
1,300	1	27	25	3 39	2,610	3	10	48	4 37
1,400	1	31	18	3 53	2,700	3	18	20	7 32

Time running, 1*h.* 42*m.* 40*s.* ; Bottom at 2,670 fathoms, in 1*h.* 40*m.* 24*s.*

* End of line. † Started new line.

This cast was not as satisfactory as usual, as Mr. Renshaw had to return for more line, leaving the shot buoyed by two inflated nipper bags at the depth of 2,550 fathoms. Mr. Danels then made another cast with two shot (unwaxed line) to verify this sounding, but the line parted when 1,400 fathoms had run out.

JANUARY 13, 1852.

Latitude 4° 14' 21" N., D. R.; longitude 19° 20' 27" W., D. R.

BOAT SOUNDING.—MR. RENSHAW.

Fathoms.	Time P. M.			Intervals.	Fathoms.	Time P. M.			Intervals.
	<i>h.</i>	<i>m.</i>	<i>s.</i>	<i>m.</i> <i>s.</i>		<i>h.</i>	<i>m.</i>	<i>s.</i>	<i>m.</i> <i>s.</i>
Started...	4	31	30		800	4	43	10	2 2
100	4	32	22	0 52	900	4	45	20	2 10
200	4	33	35	1 13	1,000	4	47	37	2 17
300	4	34	45	1 10	1,100	4	49	57	2 20
400	4	36	5	1 20	1,200	4	52	30	2 33
500	4	37	37	1 32	1,300	4	55	11	2 41
600	4	39	20	1 43	1,400	4	58	55	3 44
700	4	41	8	1 48					

Line parted; time running, 27m. 25s.; no bottom.

There was a shoal of black fish round the boat. Sea phosphorescent at night.

January 14.—At 4h. p. m. took temperatures; used a cylinder; also Green's thermometer, which came up with the mercurial column broken. Mr. Renshaw sounded with the unwaxed fishing line, and one 32-pound shot; it was calm, and the sea glassy smooth; got bottom at 2,760 fathoms, and whilst so anchored tried the currents.

JANUARY 14, 1852.

Latitude 3° 42' 18" N., ☉ m.; longitude 19° 6' 0" W., ☉ p. m.

BOAT SOUNDING.—MR. RENSHAW.

Fathoms.	Time P. M.			Intervals.	Fathoms.	Time P. M.			Intervals.
	<i>h.</i>	<i>m.</i>	<i>s.</i>	<i>m.</i> <i>s.</i>		<i>h.</i>	<i>m.</i>	<i>s.</i>	<i>m.</i> <i>s.</i>
Started...	4	11	30		1,500	4	51	28	3 55
100	4	12	27	0 57	1,600	4	55	32	4 4
200	4	13	48	1 21	1,700	4	59	40	4 8
300	4	15	28	1 40	1,800	5	4	10	4 30
400	4	17	24	1 56	1,900	5	8	33	4 23
500	4	19	36	2 12	2,000	5	13	2	4 29
600	4	22	1	2 25	2,100	5	17	51	4 49
700	4	24	38	2 37	2,200	5	22	44	4 53
800	4	27	12	2 34	2,300	5	27	49	5 5
900	4	30	7	2 55	2,400	5	32	53	5 4
1,000	4	33	12	3 05	2,500	5	38	10	5 17
1,100	4	36	34	3 22	2,600	5	43	25	5 15
1,200	4	40	10	3 36	2,700	5	49	56	6 31
1,300	4	43	45	3 35	2,760	5	54	0	4 4
1,400	4	47	33	3 48					

Line stopped; time running, 1h. 42m. 30s.; bottom.

Then tried to get another cast with two shot, but the line parted when only 640 fathoms were out.

JANUARY 14, 1852.

Latitude 3° 42' 18" N., ☉ m.; longitude 19° 6' 0" W., ☉ p. m.

BOAT SOUNDING.—MR. RENSHAW.

Fathoms.	Time P. M.			Intervals.	Fathoms.	Time P. M.			Intervals.
	<i>h.</i>	<i>m.</i>	<i>s.</i>	<i>m.</i> <i>s.</i>		<i>h.</i>	<i>m.</i>	<i>s.</i>	<i>m.</i> <i>s.</i>
Started...	7	13	32		500	7	18	44	1 33
100	7	14	10	0 38	600	7	20	22	1 38
200	7	14	44	0 34					
300	7	15	53	1 9	640	7	21	5	0 43
400	7	17	11	1 18					

Line parted ; time running, 7m. 33s. ; no bottom ; unwaxed line.

Saw large numbers of petrel. The meteorologists consider this the coldest, and the 26th July the warmest, day of the year, on the average, in the northern hemisphere.

January 15.—Mr. Renshaw is confident he got bottom at 7 a. m. to-day, from a boat, using waxed line, with one 32-pound shot, at 2,760 fathoms.

JANUARY 15, 1852.

Latitude 3° 51' 0" N., ☉ m.; longitude 19° 6' 0" W., ☉ a. m.

BOAT SOUNDING.—MR. RENSHAW.

Fathoms.	Time A. M.			Intervals.	Fathoms.	Time A. M.			Intervals.
	<i>h.</i>	<i>m.</i>	<i>s.</i>	<i>m.</i> <i>s.</i>		<i>h.</i>	<i>m.</i>	<i>s.</i>	<i>m.</i> <i>s.</i>
Started...	8	54	48		1,500	9	22	4	2 23
100	8	55	48	1 0	1,600	9	24	34	2 30
200	8	57	3	1 15	1,700	9	27	1	2 27
300	8	58	30	1 27	1,800	9	29	33	2 32
400	9	0	11	1 41	1,900	9	32	12	2 39
500	9	1	55	1 44	2,000	9	34	57	2 45
600	9	3	9	1 14	2,100	9	37	39	2 42
700	9	4	57	1 48	2,200	9	40	33	2 54
800	9	6	50	1 53	2,300	9	43	27	2 54
900	9	8	48	1 58	2,400	9	46	18	2 51
1,000	9	10	51	2 3	2,500	9	49	19	3 1
1,100	9	12	58	2 7	2,600	9	52	16	2 57
1,200	9	15	6	2 8	2,700	9	55	28	3 12
1,300	9	17	21	2 15	2,760	9	57	30	2 2
1,400	9	19	41	2 20					

Bottom ; time running, 1h. 2m. 42s.

The sea was smooth, and it was calm; he used unbleached line, smaller and stronger than that generally used; it was waxed, and ran well, in better time than common. Whilst thus anchored, tried currents, with the boat heading W. by N. The state of the sea and weather to-day were favorable for trying the transparency of the sea, as shown

by the result in the column. We are now in the calms on the southern edge of the NE. trades. The only previous occasion when the transparency was found to be as great as it is to-day, was on the 30th November, when we were becalmed in the northern edge of the NE. trades. This sounding confirms the one of last evening, the vessel having remained in nearly the same position.

Condemned and threw overboard a quantity of contract navy bread, which had been baked enough to weigh and sell well, but not to keep well on board ship in damp climates.

Had some sheet lightning. Saw petrel and sea pigeons. At night the sea was slightly phosphorescent.

January 16.—Saw a distant water spout shaped liked a large and long pine or cocoa-nut tree. At 1 p. m. reduced sail to a squall, which was preceded by showers of rain, with a narrow bright space beyond in which there was no rain. This was one of those luminous appearances which might be mistaken for a reef at night. Two sharks, with their attendant pilot fish, were near the vessel. Laid in the patent log to keep the sharks from getting it; besides the wind is so light and baffling that the patent log cannot show correct results, as it sinks and works badly when going less than $1\frac{1}{2}$ or 2 knots. In light winds it should have a short tow-line; in fresh winds it will jump out of the water, and thus record imperfectly unless it has a long tow-line. The sea is now highly phosphorescent at night.

January 17.—At 8h. 30m. a. m. furled all sail; calm and smooth sea. The temperature lines, with wooden cylinder, came in slowly, but up and down; yet the temperature of the water at 400 fathoms appears to be 10° higher than that at 200 fathoms. At 2h. 30m. p. m., at 1,000 fathoms depth, took temperature with bell-metal cylinder, the water in which evidently underwent a change of temperature in coming up. Mr. Danels got bottom with one 32-pound shot, unwaxed line, when it was perfectly calm, at 2,725 fathoms, casting from the boat, and from it thus anchored made the current observations.

JANUARY 17, 1852.

Latitude 3° 1' 26" N., ☉ m.; longitude 18° 36' 26" W., ☉ a. m.

BOAT SOUNDING.—MR. DANELS.

Fathoms.	Time A. M.			Intervals.	Fathoms.	Time A. M.			Intervals.
	<i>h.</i>	<i>m.</i>	<i>s.</i>	<i>m.</i> <i>s.</i>		<i>h.</i>	<i>m.</i>	<i>s.</i>	<i>m.</i> <i>s.</i>
Started...	9	27	43		1,500	10	12	1	4 2
100	9	28	49	1 6	1,600	10	16	19	4 18
200	9	30	27	1 38	1,700	10	20	40	4 21
300	9	32	23	1 56	1,800	10	25	19	4 39
400	9	34	34	2 11	1,900	10	30	4	4 45
500	9	37	1	2 27	2,000	10	34	51	4 47
600	9	39	43	2 42	2,100	10	39	40	4 49
700	9	42	42	2 59	2,200	10	44	43	5 3
800	9	45	51	3 9	2,300	10	49	49	5 6
900	9	49	10	3 19	2,400	10	54	55	5 6
1,000	9	52	39	3 29	2,500	11	0	12	5 17
1,100	9	56	18	3 39	2,600	11	5	37	5 25
1,200	10	0	3	3 45	2,700	11	11	19	5 42
1,300	10	4	2	3 59	2,725	11	14	20	3 1
1,400	10	7	59	3 57					

Bottom ; time running, 1h. 46m. 37s.

Many black fish were around the boat, and some of them within 18 feet of it, whilst sounding. Picked up a large specimen of the medusa, but failed in the attempt to preserve it with its beautiful colors. At 10 p. m. took the trades, light from SSE., when in latitude 3° N. longitude 18° 34' W., which agrees precisely with Maury's average limit for January, between 15° and 20° W. longitude. We find that the horizon in this equinoctial calm region is so indistinct, from haze, that good twilight observations are got with much difficulty. At night the sea very phosphorescent, and in some places near the horizon so luminous as to have the appearance of surf. The transparency of the sea, tried both from the brig and from the boat, (using the foot square blocks painted white and recently repainted,) was 24 fathoms in each case, and is the greatest transparency found during the cruise. The opportunity was very favorable. We were becalmed near the northern edge of the S. E. trades.

January 18.—This forenoon saw nine sail, just escaped, like ourselves, from the equatorial calms. The Magellan clouds have been visible for several nights. At 4h. 30m. p. m. took temperature soundings from brig, and Mr. Renshaw made a deep sea cast from a boat with one 32-pound shot and the smallest size fishing line, (which, besides being overhauled, had been waxed and rubbed smooth on board, which made it swell less and sink quicker,) and got bottom at 2,780 fathoms, when, making fast the line, made surface current observations, with a swell from the northward and a jumbling sea from the southward and eastward; light breeze (2) from SSE., and boat heading ENE.

JANUARY 18, 1852.

Latitude 2° 36' 0" N., ☉ m.; longitude 19° 22' 0" W., ☉ p. m.

BOAT SOUNDING.—MR. RENSHAW.

Fathoms	Time P. M.			Intervals.	Fathoms.	Time P. M.			Intervals.
	h.	m.	s.	m. s.		h.	m.	s.	m. s.
Started...	4	33	5		1,500	5	9	30	3 28
100	4	34	13	1 8	1,600	5	12	53	3 23
200	4	35	41	1 28	1,700	5	16	21	3 28
300	4	37	22	1 41	1,800	5	19	54	3 33
400	4	39	13	1 51	1,900	5	23	30	3 36
500	4	41	16	2 3	2,000	5	27	20	3 50
600	4	43	27	2 11	2,100	5	31	10	3 50
700	4	45	50	2 23	2,200	5	35	17	4 7
800	4	48	24	2 34	2,300	5	39	23	4 6
900	4	51	5	2 41	2,400	5	43	35	4 12
1,000	4	53	46	2 41	2,500	5	47	41	4 6
1,100	4	56	38	2 52	2,600	5	51	55	4 14
1,200	4	59	37	2 59	2,700	5	56	27	4 32
1,300	5	2	47	3 10	2,800	6	3	21	6 54
1,400	5	6	2	3 15	2,840	6	6	5	2 44

Stopped running, 1h. 33m. 0s. ; bottom at 2,780, in 1h. 28m. 53s.

By heaving the log from the boat on its return, found that the bare brig had drifted 1½ miles W. by S. during the 2¼ hours that the boat was away.

PANDORA.

January 10.—At 10 a. m., with a gentle breeze from SE. by S., surface water smooth, sometimes a little ruffled, and with an occasional low swell, rounded to and furled sail, being, by good a. m. twilight observations for latitude and longitude, in the position where, according to the admiralty chart of June 23, 1851, her Majesty's vessel Pandora sounded with 6,000 fathoms of line, but got no bottom. The correctness of our position was confirmed by the a. m. time and the noon observations of the sun. Lowered two whale boats, one on each side, to sound. In one Mr. Renshaw had the smallest size fishing line of unbleached flax, waxed and smooth, doubled for the first 100 fathoms, with a lead weighing 31 lb. 10 oz., and rounded at the bottom, with which he got bottom at 2,750 fathoms, in 1h. 9m. 3s. time of running.

JANUARY 19, 1852.

Latitude 2° 10' 10" N., ☉ m.; longitude 19° 57' 28" W., ☉ a. m.

BOAT SOUNDING.—MR. RENSHAW.

Fathoms.	Time A. M.			Intervals.	Fathoms.	Time A. M.			Intervals.
	<i>h.</i>	<i>m.</i>	<i>s.</i>	<i>m.</i> <i>s.</i>		<i>h.</i>	<i>m.</i>	<i>s.</i>	<i>m.</i> <i>s.</i>
Started...	10	3	30		1,500	10	31	4	2 47
100	10	4	5	0 35	1,600	10	33	50	2 46
200	10	5	6	1 1	1,700	10	36	46	2 56
300	10	5	45	0 39	1,800	10	39	45	2 59
400	10	7	10	1 25	1,900	10	42	51	3 6
500	10	8	55	1 45	2,000	10	46	4	3 13
600	10	10	45	1 50	2,100	10	49	28	3 24
700	10	12	38	1 53	2,200	10	52	58	3 30
800	10	14	31	1 53	2,300	10	56	27	3 29
900	10	16	29	1 58	2,400	10	59	55	3 28
1,000	10	18	37	2 8	2,500	11	3	8	3 13
1,100	10	20	58	2 21	2,600	11	6	30	3 22
1,200	10	23	13	2 15	2,700	11	10	4	3 34
1,300	10	25	35	2 22	2,800	11	15	3	4 59
1,400	10	28	17	2 42					

Line stopped, 1*h.* 11*m.* 33*s.*; bottom at 2,750, in 1*h.* 9*m.* 3*s.*; 50 fathoms slack line.

In the other boat Mr. Danels had a line of about the same size, doubled and waxed for the first 700 fathoms, (single and unwaxed after that.) He used two 32-pound shot, and got bottom at 2,690 fathoms in 1*h.* 9*m.*

JANUARY 19, 1852.

Latitude 2° 10' 10" N., ☉ m.; longitude 19° 57' 28" W., ☉ a. m.

BOAT SOUNDING.—MR. DANELS.

Fathoms.	Time A. M.			Intervals.	Fathoms.	Time A. M.			Intervals.
	<i>h.</i>	<i>m.</i>	<i>s.</i>	<i>m.</i> <i>s.</i>		<i>h.</i>	<i>m.</i>	<i>s.</i>	<i>m.</i> <i>s.</i>
Started...	9	50	58		1,500	10	20	0	2 47
100	9	51	47	0 49	1,600	10	22	48	2 48
200	9	52	50	1 3	1,700	10	25	46	2 58
300	9	54	6	1 16	1,800	10	28	47	3 1
400	9	55	30	1 24	1,900	10	31	50	3 3
500	9	57	4	1 34	2,000	10	35	2	3 12
600	9	58	46	1 42	2,100	10	38	20	3 18
700	10	0	38	1 52	2,200	10	41	37	3 17
800	10	2	40	2 2	2,300	10	45	0	3 23
900	10	4	53	2 13	2,400	10	48	24	3 24
1,000	10	7	12	2 19	2,500	10	51	58	3 34
1,100	10	9	35	2 23	2,600	10	55	41	3 43
1,200	10	12	3	2 28	2,700	11	0	26	4 45
1,300	10	14	35	2 32					
1,400	10	17	13	2 38	2,750	0	5	30	5 4

Line stopped, 1*h.* 14*m.* 32*s.*; bottom at 2,690, in 1*h.* 9*m.* 0*s.*; 60 fathoms slack line.

Mr. Danels made some current observations before his line parted, and hove the log from his boat as it returned, and found that the bare brig whilst lying to had drifted three miles WNW. during the $3\frac{1}{2}$ hours his boat was absent. Our patent log, hanging below the surface to a short scope of tow-line fast to the stern, showed a drift of two knots. It could not be expected to record all the drift made. If the Pandora used large line of any kind, which must sink slowly, and if the cast was made from the vessel whilst hove to under short sail, or with sails furled except when there was no air and current, or if the cast was made from a boat which was not kept plumb over the descending shot or lead, any quantity of line might have been paid out without giving a reliable indication of bottom. Lieutenant Maury's system of sounding with small waxed fishing line is the best that has yet been devised. With a small waxed line, in a smooth sea, in calm or light weather, with a heavy lead, sounding from a boat kept by the oars over the lead, with the line running plumb, a reliable sound may be got. Wire, such as Lieut. Walsh, U. S. N., used in the Taney, looks and feels taut all the time, and will run down straight perhaps as long as it is paid out. Spun yarn, used by Capt Ross, R. N., is rather a retrograde method upon the usual lead line. The officers of the Dolphin will hardly agree with Captain Denham, R. N., that a 9-pound lead will sink 7,076 fathoms of fishing line (up and down) and find the bottom at eight statute miles, with the line taking nine and a half hours to descend.

The line which Mr. Renshaw sounded with to-day is from two reels left at New York by the United States frigate Congress. It is much the best line we have, and is probably the same kind that Captain Denham got of Commodore McKeever.

At night the sea, though less phosphorescent than it has been lately, gave (logs by Mr. Mayo) "the appearance of sparkling foam to the crest of the small waves near us, and further off it looked like breakers."

January 20.—At 2h. 40m. p. m. furled sail. Took temperature observations, and the lines came in at a great angle.

Made three attempts to sound from a boat with unwaxed line. *First trial:* The line parted with two shot, when 700 fathoms were out.

FIRST TRIAL.

JANUARY 20, 1852.

Latitude $0^{\circ} 23' 54''$ N., \odot m.; *longitude* $21^{\circ} 45' 0''$ W., \odot p. m.

BOAT SOUNDING.—MR. RENSHAW.

Fathoms.	Time P. M.			Intervals.	Fathoms.	Time P. M.			Intervals.
	<i>h.</i>	<i>m.</i>	<i>s.</i>	<i>m.</i> <i>s.</i>		<i>h.</i>	<i>m.</i>	<i>s.</i>	<i>m.</i> <i>s.</i>
Started...	3	22	50		400	3	27	17	1 24
100	3	23	42	0 52	500	3	28	35	1 18
200	3	24	42	1 0	600	3	30	12	1 37
300	3	25	53	1 11	700	3	32	19	2 7

Line parted; time running, 9m. 29s.; no bottom.

Second trial: The line parted with one shot, with 830 fathoms out.

SECOND TRIAL

JANUARY 12, 1852.

Latitude 0° 23' 54" N., ☉ m.; *longitude* 21° 45' 0" W., ☉ p. m.

BOAT SOUNDING.—MR. RENSHAW.

Fathoms.	Time P. M.			Intervals.	Fathoms.	Time P. M.			Intervals.
	<i>h.</i>	<i>m.</i>	<i>s.</i>	<i>m.</i> <i>s.</i>		<i>h.</i>	<i>m.</i>	<i>s.</i>	<i>m.</i> <i>s.</i>
Started...	3	47	25		500	3	55	23	2 11
100	3	48	19	0 54	600	3	57	48	2 25
200	3	49	38	1 19	700	4	0	35	2 47
300	3	51	18	1 40	800	4	4	40	4 5
400	3	53	12	1 54	830	4	6	0	1 20

Line parted ; time running, 18m. 35s. ; no bottom.

Third trial: (with one shot); cut the line (it was getting dark) when 3,000 fathoms were out, and returned to the brig, which was three miles off.

THIRD TRIAL.

JANUARY 20, 1852.

Latitude 0° 23' 54" N., ☉ m.; *longitude* 21° 45' 0" W., ☉ p. m.

BOAT SOUNDING.—MR. RENSHAW.

Fathoms.	Time P. M.			Intervals.	Fathoms.	Time P. M.			Intervals.
	<i>h.</i>	<i>m.</i>	<i>s.</i>	<i>m.</i> <i>s.</i>		<i>h.</i>	<i>m.</i>	<i>s.</i>	<i>m.</i> <i>s.</i>
Started...	4	55	54		1,600	5	35	23	3 28
100	4	56	54	1 0	1,700	5	38	49	3 26
200	4	58	19	1 25	1,800	5	42	10	3 21
300	5	0	2	1 43	1,900	5	45	42	3 32
400	5	1	52	1 50	2,000	5	49	16	3 34
500	5	3	49	1 57	2,100	5	53	14	3 58
600	5	6	21	2 32	2,200	5	56	50	3 36
700	5	8	46	2 25	2,300	6	0	27	3 37
800	5	11	29	2 43	2,400	6	3	47	3 20
900	5	14	14	2 45	2,500	6	7	18	3 31
1,000	5	16	56	2 42	2,600	6	10	35	3 17
1,100	5	19	52	2 56	2,700	6	14	6	3 31
1,200	5	22	48	2 56	2,800	6	17	20	3 14
1,300	5	25	40	2 52	2,900	6	20	36	3 16
1,400	5	28	48	3 8	3,000	6	24	10	3 34
1,500	5	31	55	3 7					

Cut the line ; time running, 1h. 28m. 16s. ; no bottom at 2,000.

The line had not run up and down, and the sounding was not satisfactory, owing, Mr. Renshaw reports, to the “irregular, short, chopping sea, occasioned no doubt by the squalls of the preceding night.”
 Estimate no bottom at 2,000 fathoms.

CHAPTER IV.

Enter the volcanic region ; pass through it three times—Make unsuccessful search for “Krusenstern’s volcano,” “Triton’s shoal,” “Bouvet’s sandy island,” “Aquila reef,” “Le Pacific, shock,” and “Crown reef”—Take many deep-sea soundings, and find no signs of volcanoes or other dangers.

January 21.—At 0h. 54m. a. m. crossed the equator in longitude $22^{\circ} 39'$ W., and entered the volcanic region which is described in the instructions proposed by Lieutenant Maury, Superintendent of the Naval Observatory, and adopted by the Navy Department for my guidance, as extending from the equator to 7° S. between 18° and 25° W. longitude, and which is further described in the English sailing directions (Laurie’s South Atlantic Directory, London, 1845) “to be a tract which has been very fertile in the production of vigias.”

At 9 a. m. took temperature soundings from the brig and a deep-sea cast from a boat, (Mr. Danels.) with one 32-pound shot, unwaxed line. The line stopped running at 2,125 fathoms, and Mr. Danels thinks it then parted. The sea was rough and irregular; wind 4.

JANUARY 21, 1852.

Latitude $0^{\circ} 34' 30''$ S., \odot m.; *longitude* $22^{\circ} 40' 18''$ W., \odot a. m.

BOAT SOUNDING.—MR. DANELS.

Fathoms.	Time A. M.			Intervals.	Fathoms.	Time A. M.			Intervals.
	<i>h.</i>	<i>m.</i>	<i>s.</i>	<i>m.</i> <i>s.</i>		<i>h.</i>	<i>m.</i>	<i>s.</i>	<i>m.</i> <i>s.</i>
Started . . .	9	37	46		1,200	10	9	14	3 51
100	9	38	30	0 44	1,300	10	13	14	4 0
200	9	39	58	1 28	1,400	10	17	20	4 6
300	9	41	52	1 54	1,500	10	21	29	4 9
400	9	44	4	2 12	1,600	10	25	50	4 21
500	9	46	30	2 26	1,700	10	30	25	4 35
600	9	49	0	2 30	1,800	10	34	50	4 25
700	9	51	50	2 50	1,900	10	39	40	4 50
800	9	54	56	3 6	2,000	10	44	39	4 59
900	9	58	16	3 20	2,100	10	49	48	5 9
1,000	10	1	47	3 31	2,125	10	51	45	1 57
1,100	10	5	23	3 36					

Line parted ; time running, 1h. 13m. 59s.

Boarded an American whaling bark. The appearance of the sea at night is much changed, and scarcely a sparkle can now be seen.

January 22.—At 9 a. m. took temperature soundings from the brig and a deep-sea cast from a boat. Mr. Renshaw thought he got bottom at 3,000 fathoms, with one shot and the unwaxed line. To keep the line running up and down, Mr. R. was obliged to pull moderately with three oars nearly all the time, though the wind and sea were moderate (3) at the time.

JANUARY 22, 1852.

Latitude 2° 27' 39" S., ☉ m.; longitude 23° 37' 58" W., ☉ a. m.

BOAT SOUNDING.—MR. RENSHAW.

Fathoms.	Time A. M.			Intervals.	Fathoms.	Time A. M.			Intervals.
	<i>h.</i>	<i>m.</i>	<i>s.</i>	<i>m.</i> <i>s.</i>		<i>h.</i>	<i>m.</i>	<i>s.</i>	<i>m.</i> <i>s.</i>
Started...	9	15	40		1,600	10	3	21	4 3
100	9	17	0	1 20	1,700	10	7	22	4 1
200	9	18	45	1 45	1,800	10	11	30	4 8
300	9	20	42	1 57	1,900	10	15	32	4 2
400	9	23	7	2 25	2,000	10	19	43	4 11
500	9	25	42	2 35	2,100	10	23	51	4 8
600	9	28	22	2 40	2,200	10	28	6	4 15
700	9	31	21	2 59	2,300	10	32	22	4 16
800	9	34	21	3 0	2,400	10	37	58	5 36
900	9	37	41	3 20	2,500	10	42	19	4 21
1,000	9	41	0	3 19	2,600	10	46	27	4 8
1,100	9	44	21	3 21	2,700	10	50	36	4 9
1,200	9	47	55	3 34	2,800	10	55	6	4 30
1,300	9	51	33	3 38	2,900	10	59	50	4 44
1,400	9	55	20	3 47	3,000	11	4	30	4 40
1,500	9	59	18	3 58	3,080	11	11	58	7 28

Time running, 1*h.* 56*m.* 18*s.*; bottom at 3,020, in 1*h.* 50*m.* 42*s.*

Took current observations from boat riding to the shot and heading east; the result given is probably drift. Then cut the line and pulled by the log three miles to rejoin the brig, which had drifted that distance, lying to under bare poles, in 3*h.* 25*m.* Saw one sail. The transparency of the water was tried from the brig, and also from the boat, with different foot-square blocks painted white. The trial from the boat gave two fathoms the most.

January 23.—At 9*h.* 30*m.* a. m. took temperature soundings on board, and a deep-sea cast from a boat, with one shot, unwaxed line. Sea somewhat rough on the surface, such as is usual with a moderate trade wind. Mr. Danels reports that at 2,200 fathoms the line ran very slowly up and down; when stopping it he found there was no strain on it, and after hauling in 200 fathoms more there was still so little strain upon it that one man could haul it in easily; he concluded it had parted.

JANUARY 23, 1852.

Latitude 4° 6' 18" S., ☉ m.; longitude 24° 46' 45" W., ☉ a. m.

BOAT SOUNDING.—MR. DANIELS.

Fathoms.	Time A. M.			Intervals.	Fathoms.	Time A. M.			Intervals.
	<i>h.</i>	<i>m.</i>	<i>s.</i>	<i>m.</i> <i>s.</i>		<i>h.</i>	<i>m.</i>	<i>s.</i>	<i>m.</i> <i>s.</i>
Started . . .	9	34	5		1,200	10	5	59	3 30
100	9	35	19	1 14	1,300	10	9	43	3 44
200	9	37	0	1 41	1,400	10	13	36	3 53
300	9	39	1	2 1	1,500	10	17	26	3 50
400	9	41	15	2 14	1,600	10	21	22	3 56
500	9	43	44	2 29	1,700	10	25	33	4 11
600	9	46	36	2 52	1,800	10	29	49	4 16
700	9	49	30	2 54	1,900	10	34	15	4 26
800	9	52	33	3 3	2,000	10	39	4	4 49
900	9	55	45	3 12	2,100	10	43	52	4 48
1,000	9	59	7	3 22	2,200	10	50	20	6 28
1,100	10	2	29	3 22	2,215	10	51	45	1 25

Line parted ; time running, 1h. 17m. 40s.

The brig, lying to under bare poles, drifted, by the boat's log, two-thirds of a knot per hour. At 4 p. m. passed out of the volcanic region, in latitude 4° 25' S., longitude 25° W. In the morning and evening noticed shoals of bonita and albacore, apparently chasing small fish, and flocks of sea-fowl preying on those driven out of water by the bonita and albacore. These last seem to shole together.

January 24.—At 9h. 30m. a. m. took temperature soundings from brig, and made a deep sea cast and current observations from the boat. Mr. Renshaw got bottom at 2,970 fathoms with the smallest size waxed line and one 32-pound shot. The line ran remarkably well. The reel was checked but twice during the running of the first 100 fathoms, and not again ; but when the 400 fathoms were out, the line was pulled off the reel by hand as in heaving the log, so that the shot had not to turn the reel but only to take the line down.

JANUARY 24, 1852.

Latitude 5° 42' 0" S., ☉ m.; longitude 25° 40' 30" W., ☉ a. m.

BOAT SOUNDING.—MR. RENSHAW.

Fathoms.	Time A. M.			Intervals.	Fathoms.	Time A. M.			Intervals.
	<i>h.</i>	<i>m.</i>	<i>s.</i>	<i>m.</i> <i>s.</i>		<i>h.</i>	<i>m.</i>	<i>s.</i>	<i>m.</i> <i>s.</i>
Started...	9	20	32		1,600	9	58	48	3 18
100	9	21	25	0 53	1,700	10	2	10	3 22
200	9	22	45	1 20	1,800	10	5	38	3 28
300	9	24	20	1 35	1,900	10	9	7	3 29
400	9	26	9	1 49	2,000	10	12	42	3 35
500	9	28	8	1 59	2,100	10	16	25	3 43
600	9	30	22	2 14	2,200	10	20	9	3 44
700	9	32	38	2 16	2,300	10	23	59	3 50
800	9	35	5	2 27	2,400	10	27	55	3 56
900	9	37	35	2 30	2,500	10	31	59	4 4
1,000	9	40	16	2 41	2,600	10	35	58	3 59
1,100	9	43	3	2 47	2,700	10	40	11	4 13
1,200	9	45	58	2 55	2,800	10	44	33	4 22
1,300	9	49	3	3 5	2,900	10	48	54	4 21
1,400	9	52	15	3 12	3,000	10	54	58	6 4
1,500	9	55	30	3 15					

Line stopped, 1*h.* 34*m.* 26*s.* ; bottom at 2,970, in 1*h.* 32*m.* 37*s.*

The current observations taken from the boat whilst riding to the shot with this long scope of line was probably affected by the breeze, moderate (4) from SE.

The transparency was tried from the brig and boat with the white painted foot-square blocks. The observation from the boat (distinguished by the letter b) gave three fathoms most.

January 25.—At 9*h.* 30*m.* a. m. took temperature observations from the brig, and deep-sea soundings and current observations from the boat. Mr. Danels got bottom, with one shot and waxed line, at 3,250 fathoms ; the line ran well. Saw one sail.

JANUARY 25, 1852.

Latitude 6° 59' 42" S., ☉ m.; longitude 25° 42' 54" W., ☉ a. m.

BOAT SOUNDING.—MR. DANELS.

Fathoms.	Time A. M.			Intervals.	Fathoms.	Time A. M.			Intervals.
	<i>h.</i>	<i>m.</i>	<i>s.</i>	<i>m.</i> <i>s.</i>		<i>h.</i>	<i>m.</i>	<i>s.</i>	<i>m.</i> <i>s.</i>
Started...	9	33	5		1,700	10	12	16	3 17
100	9	34	10	1 5	1,800	10	15	33	3 17
200	9	35	33	1 23	1,900	10	19	3	3 30
300	9	37	10	1 37	2,000	10	22	34	3 31
400	9	38	58	1 48	2,100	10	26	11	3 37
500	9	40	50	1 52	2,200	10	29	48	3 37
600	9	42	48	1 58	2,300	10	33	36	3 48
700	9	45	8	2 20	2,400	10	37	20	3 44
800	9	47	22	2 14	2,500	10	41	17	3 57
900	9	49	43	2 21	2,600	10	45	15	3 58
1,000	9	51	41	1 58	2,700	10	49	15	4 0
1,100	9	54	20	2 39	2,800	10	53	17	4 2
1,200	9	57	3	2 43	2,900	10	57	17	4 0
1,300	9	59	55	2 52	3,000	11	1	30	4 13
1,400	10	2	45	2 50	3,100	11	5	41	4 11
1,500	10	5	48	3 3	3,200	11	9	51	4 10
1,600	10	8	59	3 11	3,290	11	15	51	6 0

Line stopped, 1h. 42m. 46s.; bottom at 3,250, 1h. 40m. 6s.

January 26.—At 9h. 10m. p. m. saw a partial lunar rainbow. This morning again entered the volcanic region in 5° 45' S., longitude 25° W.

January 27.—Mr. Danels got bottom from the boat, with one shot and 3,200 fathoms waxed fishing line. The sea was rough and irregular.

JANUARY 27, 1852.

Latitude 4° 11' 34" S., ☉ m.; longitude 24° 0' 41" W., ☉ a. m.

BOAT SOUNDING.—MR. DANELS.

Fathoms.	Time A. M.			Intervals.	Fathoms.	Time A. M.			Intervals.
	<i>h.</i>	<i>m.</i>	<i>ss</i>	<i>m.</i> <i>s.</i>		<i>h.</i>	<i>m.</i>	<i>s.</i>	<i>m.</i> <i>ss</i>
Started...	9	36	48		1,700	10	20	4	3 31
100	9	37	50	1 2	1,800	10	23	47	3 43
200	9	39	20	1 30	1,900	10	27	35	3 48
300	9	41	0	1 40	2,000	10	31	29	3 54
400	9	43	0	2 0	2,100	10	35	40	4 11
500	9	45	5	2 5	2,200	10	39	30	3 50
600	9	47	18	2 13	2,300	10	43	31	4 1
700	9	49	40	2 22	2,400	10	47	38	4 7
800	9	52	10	2 30	2,500	10	51	45	4 7
900	9	54	48	2 38	2,600	10	56	9	4 24
1,000	9	57	35	2 47	2,700	11	0	35	4 26
1,100	10	0	30	2 55	2,800	11	4	56	4 21
1,200	10	3	28	2 58	2,900	11	9	43	4 47
1,300	10	6	40	3 12	3,000	11	14	18	4 35
1,400	10	9	52	3 12	3,100	11	19	52	4 34
1,500	10	13	8	3 16	3,200	11	25	44	5 52
1,600	10	16	33	3 25					

Bottom; time running, 1h. 48m. 56s.

After sounding, parted the line at about 400 or 500 fathoms below the surface, and he then found that in $15\frac{1}{2}$ minutes the next 100 fathoms was laid out by drift of boat merely. Sea somewhat phosphorescent at night.

January 28.—Examined the log lines and glasses and found them correct. This examination was required to be made daily, and the result entered in the log book, during the cruise, but mention of it is omitted in this abstract.

January 29.—Mr. Danels got bottom, with one 32-pound shot and waxed line, at 3,575 fathoms. Wind 3; sea moderate but irregular.

JANUARY 29, 1852.

Latitude $3^{\circ} 33' 28''$ S., \odot m.; *longitude* $22^{\circ} 38' 27''$ W., \odot a. m.

BOAT SOUNDING.—MR. DANELS.

Fathoms.	Time A. M.			Intervals.	Fathoms.	Time A. M.			Intervals.
	<i>h.</i>	<i>m.</i>	<i>s.</i>	<i>m.</i> <i>s.</i>		<i>h.</i>	<i>m.</i>	<i>s.</i>	<i>m.</i> <i>s.</i>
Started...	9	19	12		1,900	10	11	12	3 29
100	9	20	15	1 3	2,000	10	14	45	3 33
200	9	21	45	1 30	2,100	10	18	23	3 38
300	9	23	35	1 50	2,200	10	21	57	3 34
400	9	25	34	1 59	2,300	10	25	37	3 40
500	9	27	46	2 12	2,400	10	29	10	3 33
600	9	30	0	2 14	2,500	10	32	44	3 34
700	9	32	45	2 45	2,600	10	36	15	3 31
800	9	36	7	3 22	2,700	10	39	58	3 43
900	9	39	0	2 53	2,800	10	44	5	4 7
1,000	9	41	48	2 48	2,900	10	49	30	5 25
1,100	9	44	45	2 57	3,000	10	53	38	4 8
1,200	9	47	47	3 2	3,100	10	57	58	4 20
1,300	9	51	1	3 14	3,200	11	2	57	4 59
1,400	9	54	18	3 17	3,300	11	7	36	4 39
1,500	9	57	36	3 18	3,400	11	12	45	5 9
1,600	10	0	50	3 14	3,500	11	17	7	4 22
1,700	10	4	15	3 25	3,600	11	22	22	5 15
1,800	10	7	43	3 28	3,700	11	33	0	10 38

Time running, 2h. 13m. 48s.; bottom at 3,575, in 1h. 59m. 13s.

Saw sea birds and flying fish.

January 30.—Saw one sail and many sea-birds. Mr. Renshaw made a deep-sea cast from a boat, wind 2, swell moderate, and little surface sea. Used two 32-pound shot, waxed line. The first 1,000 fathoms of line was of the smallest size, doubled and waxed; the rest was one-third larger, and was tarred. This sized line weighs 10 ounces more in the 100 fathoms after being tarred. The line ran very quick and well to 2,650 fathoms, when it parted 200 fathoms below the surface, at a bad place, not detected when it was overhauled.

JANUARY 30, 1852.

Latitude 2° 47' 0" S., ☉ m.; longitude 20° 54' 0" W., ☉ p. m.

BOAT SOUNDING.—MR. RENSHAW.

Fathoms.	Time P. M.			Intervals.	Fathoms.	Time P. M.			Intervals.
	<i>h.</i>	<i>m.</i>	<i>s.</i>	<i>m.</i> <i>s.</i>		<i>h.</i>	<i>m.</i>	<i>s.</i>	<i>m.</i> <i>s.</i>
Started...	3	37	50		1,400	4	4	15	2 41
100	3	38	41	0 51	1,500	4	7	5	2 50
200	3	39	45	1 4	1,600	4	9	50	2 55
300	3	41	0	1 15	1,700	4	12	41	2 51
400	3	42	28	1 28	1,800	4	15	36	2 55
500	3	44	6	1 38	1,900	4	18	36	3 0
600	3	45	50	1 44	2,000	4	21	42	3 6
700	3	47	37	1 47	2,100	4	24	50	3 8
800	3	49	41	2 4	2,200	4	28	0	3 10
900	3	51	55	2 14	2,300	4	31	13	3 13
1,000	3	54	15	2 20	2,400	4	34	38	3 25
1,100	3	56	31	2 16	2,500	4	38	4	3 26
1,200	3	58	56	2 25	2,600	4	41	34	3 30
1,300	4	1	34	2 38	2,650	4	44	40	3 6

Line parted; time running, 1*h.* 6*m.* 50*s.*

KRUSENSTERN'S VOLCANO.

January 31.—At 7*h.* a. m. furled sail, took temperature soundings from the brig, and Mr. Mayo got bottom (heaving from a boat) with one 32-pound shot and waxed line at 3,450 fathoms, having hauled in 100 fathoms of slack-line; wind light, swell long and smooth; weather squally; and with the boat thus anchored took the current observations given in the abstract.

JANUARY 31, 1852.

Latitude 2° 26' 8" S., ☉ m.; longitude 20° 47' 36" W., ☉ a. m.

BOAT SOUNDING.—MR. MAYO.

Fathoms.	Time A. M.			Intervals.	Fathoms.	Time A. M.			Intervals.
	<i>h.</i>	<i>m.</i>	<i>s.</i>	<i>m.</i> <i>s.</i>		<i>h.</i>	<i>m.</i>	<i>s.</i>	<i>m.</i> <i>s.</i>
Started...	6	51	55		1,900	7	52	33	4 24
100	6	52	50	0 55	2,000	7	57	0	4 27
200	6	54	10	1 20	2,100				
300	6	55	55	1 45	2,200	8	5	43	8 43
400	6	58	4	2 9	2,300	8	10	7	4 24
500	7	0	35	2 31	2,400	8	14	24	4 17
600	7	3	18	2 43	2,500	8	19	11	4 47
700	7	6	18	3 0	2,600	8	24	0	4 49
800	7	9	30	3 12	2,700	8	29	10	5 10
900	7	12	47	3 17	2,800	8	34	7	4 57
1,000	7	14	27	1 40	2,900	8	39	7	5 0
1,100	7	17	57	3 30	3,000	8	44	25	5 18
1,200	7	21	30	3 33	3,100	8	49	52	5 27
1,300	7	25	16	3 46	3,200	8	56	40	6 48
1,400	7	29	11	3 55	3,300	9	4	5	7 25
1,500	7	32	55	3 44	3,400	9	12	12	8 7
1,600	7	39	38	6 43	3,500	9	20	25	8 13
1,700	7	43	54	4 16	3,550	9	23	35	3 10
1,800	7	48	9	4 15					

Time running, 2*h.* 31*m.* 40*s.*; Bottom at 3,450 fathoms, in 2*h.* 24*m.* 24*s.*

This sounding was taken in the immediate neighborhood of Admiral Krusenstern's supposed volcano, of which the following account is given on p. 81 of Laurie's South Atlantic Directory, London, 1845 :

"On the 19th of May, 1806, at five in the evening, 'we saw, in latitude $2^{\circ} 43'$ S. and longitude $20^{\circ} 35'$ W., in the direction of NNW., and at the distance of about twelve or fifteen miles, a singular phenomenon, but which owing to the lateness of the day, we were unable to examine sufficiently close to ascertain the nature of it.

"'A cloud of smoke arose to about the height of a ship's mast; disappeared suddenly; then rose again, and vanished entirely. It could not be a water spout, nor a ship on fire, as some persons on board conceived, for the smoke rose much too high; and Dr. Horner was of the opinion that if the whole was not an ocular deception, occasioned by a peculiar refraction of the rays of light, it had all the appearance of a volcanic eruption, and was possibly the forerunner of an island.'"

The Russian admiral was in latitude $2^{\circ} 43'$ south, longitude $20^{\circ} 35'$ west, when he saw, late in the day, "a singular phenomenon," "in the direction of NNW., and at the distance of about twelve or fifteen miles." Assuming this to be the compass bearing, and the distance fifteen miles, the position of the phenomenon would be $2^{\circ} 31'$ south, and $20^{\circ} 44'$ west. Our sounding station, at 7 a. m., subsequently proved—by observations of the sun, got that morning for longitude, and at noon for latitude—to be a few miles NW. of this inferred position, which, however, was covered by our radius of vision.

We saw no indication whatever of this supposed volcano, which has not been heard of since 1806, and which was fruitlessly searched for by the United States exploring expedition in 1838.

February 1.—Sunday.—A long swell from southward and eastward. Mustered the crew, and Mr. Mayo (it being his turn) read the articles of war to the officers and crew.

February 2.—Sea quite sparkling at night. At 9h. 30m. a.m. dropped a boat to sound, furled sail, and took temperature soundings from the brig. The cylinder with water, from 400 fathoms depth, was hauled up in fifty-five minutes, and came in at a great angle. Mr. Danels reports that he used two shot and waxed line, and that the line parted at a great depth, when 1,960 fathoms were out.

FEBRUARY 2, 1852.

Latitude 1° 9' 30" S., D. R.; longitude 19° 28' 42" W., ☉ a. m.

BOAT SOUNDING.—MR. DANELS.

Fathoms.	Time A. M.			Intervals.	Fathoms.	Time A. M.			Intervals.
	<i>h.</i>	<i>m.</i>	<i>s.</i>	<i>m.</i> <i>s.</i>		<i>h.</i>	<i>m.</i>	<i>s.</i>	<i>m.</i> <i>s.</i>
Started...	9	20	10		1,200	9	42	43	2 34
100	9	21	5	0 55	1,300	9	45	13	2 30
200	9	22	17	1 12	1,400	9	47	46	2 33
300	9	23	43	1 26	1,500	9	50	30	2 44
400	9	25	20	1 37	1,600	9	53	12	2 42
500	9	27	5	1 45	1,700	9	55	55	2 43
600	9	28	57	1 52	1,800	9	58	40	2 45
700	9	30	57	2 0	1,900	10	1	38	2 58
800	9	33	3	2 6	1,940	10	2	38	1 0
900	9	35	15	2 12					
1,000	9	37	28	2 13	1,960	10	6	38	4 0
1,100	9	40	9	2 41					

Line parted; time running, 46m. 28s.; no bottom.

The log was then hove, with the boat heading ESE. Wind SE. by S.; force 3. Sea rough and irregular. The result shows that the boat drifted WNW. six-tenths of a knot per hour.

February 3.—The sea unusually phosphorescent. Crossed the equator at 4h. a. m., in 18° 59' 29" west—having passed a second time through the volcanic region. At 0h. 30m. p. m., furled sail—the temperature lines came in much inclined. Two trials were made at 400 fathoms; the results differed 4°.

Caught a shark seven feet long. Mr. Danels made a deep-sea cast from a boat; wind light, (2;) sea smooth—an excellent time for sounding. The line on the reel was the largest size fishing line, waxed throughout, and double first 200 fathoms; used one 32 shot. When 3,800 fathoms had run out, Mr. Danels discovered, much to his surprise, that the line stretched ahead with much inclination, and continued so after he had pulled hard for fifteen minutes, and gathered in 300 fathoms of it; when, finding that the cast was lost, as the line had not run up and down, though he had pulled gently on two oars whilst making the cast, he had the foul-line (which had been hauled in) cut off, and the reel end bent to the shot end, and found that the line then run out at the rate of six minutes to 100 fathoms, though the shot was not acting on it.

FEBRUARY 3, 1852.

Latitude 0° 18' 5" N., ☉ m.; longitude 18° 40' 36" W., ☉ $\frac{a. m.}{p. m.}$

BOAT SOUNDING.—MR. DANELS.

Fathoms.	Time P. M.			Intervals.	Fathoms.	Time P. M.			Intervals.
	<i>h.</i>	<i>m.</i>	<i>s.</i>	<i>m.</i> <i>s.</i>		<i>h.</i>	<i>m.</i>	<i>s.</i>	<i>m.</i> <i>s.</i>
Started...	12	27	48		2,000	1	22	20	2 49
100	12	28	59	1 11	2,100	1	26	5	3 45
200	12	30	23	1 24	2,200	1	29	53	3 48
300	12	32	9	1 46	2,300	1	33	38	3 45
400	12	34	8	1 59	2,400	1	37	37	3 59
500	12	36	23	2 15	2,500	1	42	45	5 8
600	12	38	42	2 19	2,600	1	46	43	3 58
700	12	41	8	2 26	2,700	1	50	32	3 49
800	12	43	48	2 40	2,800	1	54	22	3 50
900	12	46	40	2 52	2,900	1	58	17	3 55
1,000	12	49	38	2 58	3,000	2	2	23	4 6
1,100	12	52	40	3 2	3,100	2	6	51	4 28
1,200	12	55	50	3 10	3,200	2	11	28	4 37
1,300	12	59	2	3 12	3,300	2	16	4	4 36
1,400	1	2	16	3 14	3,400	2	20	42	4 38
1,500	1	5	44	3 28	3,500	2	25	24	4 42
1,600	1	9	2	3 18	3,600	2	30	10	4 46
1,700	1	12	27	3 25	3,700	2	34	35	4 25
1,800	1	15	45	3 18	3,800	2	42	30	7 55
1,900	1	19	31	3 46					

Stopped line ; time running, 2*h.* 14*m.* 42*s.* ; no bottom at 2,000.

The current observations then made from the boat, (which was probably its drift,) and the current found by the observations and reckoning of the vessel, was eight-tenths knot per hour, setting westwardly. Assumed that there was no bottom at 2,000 fathoms.

February 4.—Took temperature soundings from the brig, whilst Lieutenant Commanding Lee and Mr. Danels were making a deep-sea cast with a waxed fishing line, of medium size, and one shot, from the bows of a whale boat.

The wind was light from SSE., (2.) There was some sea on, but the opportunity was not unfavorable for sounding. The boat dropped rapidly from the shot, from the time it was let go—taking us by surprise, at first, as this was not the case in other parts of the sea ; and though we were using two oars, it was difficult to pull just so much as would keep up to, without sometimes getting ahead of the line. At 1,000 fathoms pulled ahead four minutes to get the line up and down, and at 2,000 fathoms the line was found again tending ahead ; pulled ahead, got in 100 fathoms, and found the line up and down ; when stopped the sounding and took current observations. Both the boat's log and the brig's reckoning show a current of one and two-tenths knot, about WNW. To sound in this equatorial current, more weight is necessary to sink the line quickly and straight ; but experience shows that our line rarely bears more than one shot. Assume no bottom at 1,900 fathoms.

FEBRUARY 4, 1852.

Latitude 0° 15' 55" N., ☉ *m.*; *longitude* 18° 51' 0" W., ☉ *p. m.*

BOAT SOUNDING.—LIEUT. COMMANDING LEE.

Fathoms.	Time P. M.			Intervals.	Fathoms.	Time P. M.			Intervals.
	<i>h.</i>	<i>m.</i>	<i>s.</i>	<i>m.</i> <i>s.</i>		<i>h.</i>	<i>m.</i>	<i>s.</i>	<i>m.</i> <i>s.</i>
Started...	2	46	53		Started...	3	12	43	
100	2	47	52	0 59	1,100	3	15	45	3 2
200	2	49	16	1 24	1,200	3	18	33	2 48
300	2	50	55	1 39	1,300	3	21	27	2 54
400	2	52	50	1 55	1,400	3	24	28	3 1
500	2	54	57	2 7	1,500	3	27	34	3 6
600	2	57	15	2 18	1,600	3	30	50	3 16
700	2	59	50	2 35	1,700	3	34	22	3 32
800	3	2	29	2 39	1,800	3	38	18	3 56
900	3	5	16	2 47	1,900	3	42	20	4 2
1,000	3	8	35	3 19	2,000	3	46	31	4 11
Stopped line.									

Stopped the line ; time running, 55m. 30s. ; no bottom at 1,900.

February 5.—Took temperature soundings from the brig, whilst Lieutenant Commanding Lee and Mr. Renshaw were making a deep sea cast from a boat. Wind light ; sea smooth, with moderate swell—a good chance to sound.

Used one shot on the smallest and best line on board, well waxed and rubbed, which ran smoothly. It required, from the time the shot was let go, great watchfulness on the part of the officer in the bow watching the descent of the line, to pull in time, and yet not too much, on the oars, so as to keep the line running up and down in this current, which was evidently affecting the boat. When the line stopped running, at 2,850 fathoms, we were surprised to find it tending considerably ahead. Pulled ahead strong on the oars for ten minutes, and hauled in 170 fathoms of line, which brought it up and down and taut, and made the sounding 2,680 fathoms. Owing to the current, this sound was not perfectly satisfactory.

FEBRUARY 5, 1852.

Latitude $0^{\circ} 45' 1''$ N., \odot m.; *longitude* $18^{\circ} 28' 40''$ W., \odot a. m.

BOAT SOUNDING.—MR. RENSHAW.

Fathoms.	Time P. M.			Intervals.	Fathoms.	Time P. M.			Intervals.
	<i>h.</i>	<i>m.</i>	<i>s.</i>	<i>m.</i> <i>s.</i>		<i>h.</i>	<i>m.</i>	<i>s.</i>	<i>m.</i> <i>s.</i>
Started...	3	12	48		1,500	3	38	53	2 21
100	3	13	39	0 51	1,600	3	41	21	2 28
200	3	14	42	1 3	1,700	3	43	58	2 37
300	3	15	58	1 16	1,800	3	46	40	2 42
400	3	17	23	1 25	1,900	3	49	25	2 45
500	3	18	56	1 33	2,000	3	52	17	2 52
600	3	20	30	1 34	2,100	3	55	15	2 58
700	3	22	12	1 42	2,200	3	58	5	2 50
800	3	23	56	1 44	2,300	4	1	11	3 6
900	3	25	46	1 50	2,400	4	4	18	3 7
1,000	3	27	45	1 59	2,500	4	7	35	3 17
1,100	3	29	52	2 7	2,600	4	10	25	2 50
1,200	3	31	59	2 7	2,700	4	13	53	3 28
1,300	3	34	12	2 13	2,800	4	17	45	3 52
1,400	3	36	32	2 20	2,850	4	20	35	2 50

Time running, 1*h.* 7*m.* 47*s.*; bottom at 2,680, in 1*h.* 0*m.* 23*s.*

With the boat anchored by the shot, held on to the line and hove the log three times, and found a surface current of one knot per hour, setting NW. by W. The reckoning, at noon, for the preceding 24 hours, showed one and three tenths knot per hour, current setting WNW.

The soundings of this and the two preceding days have been made in the same vicinity.

February 6.—The number of condemned shot, and the quantity of line used in our experiments and soundings, has been much larger than would have been required had our line been good. With but 75,000 fathoms of line left, it will be necessary to sound less frequently hereafter.

February 7.—Furled sail, broadside to, and took temperature soundings. The lines came up well astern. Sea highly phosphorescent.

February 8.—Furled sail, though it was nearly calm, and took temperature soundings. The lines went down, and came up, nearly up and down. These temperatures are as good as can be got from water brought up in wooden cylinders. We had a light air from SW. for one or two hours to-day. The sea is very phosphorescent. The trail from the conductor resembled a bar of burnished light. Lost the SE. trades to-day in $2^{\circ} 15'$ N. and $15^{\circ} 45'$ W.

February 9.—Prepared to try the temperatures with one of Green's marine thermometers in an iron bottle, and by the water brought up at the same trial and from the same depth in a wooden cylinder. A dead calm; water smooth and glassy. Furled sail, though it is now calm, to prevent injury to the observations, or lines, should a breeze spring up during the operation. With the surface water at 81° , cast with 50 fathoms of line up and down, at which depth Green's thermometer registered a temperature of $56\frac{1}{2}^{\circ}$, whilst the water brought up in the

wooden cylinder from the same depth was $67\frac{1}{2}^{\circ}$, as shown by the thermometer used for the surface water. The thermometer and the cylinders remained down 10 minutes, and the line came in up and down. At 200 fathoms depth, with surface water same as before, the same Green's thermometer registered $51\frac{1}{2}^{\circ}$, and the water brought up in the same wooden cylinder, same time and depth, was 63° . The line came in up and down in 12 minutes time, after the thermometer and cylinders had remained 25 minutes at the 200 fathoms to cool. Then made a cast with 400 fathoms line; having two of Green's marine thermometers in an iron bottle, and one wooden cylinder, bent on just above a 56lb. Stellwagen lead. In hauling in the line it parted at 200 fathoms.

This loss of Green's thermometers prevented continuing the observations to a greater depth and verifying those just made. Green's thermometer is too easily deranged to suit this service. Then made another cast with a 56lb. Stellwagen lead to 900 fathoms of deep sea line, using a wooden cylinder (served with tarred fishing line) weighing eight pounds, and a composition metal cylinder weighing $33\frac{1}{2}$ lbs. Both cylinders were fitted with a valve at each end, opening upwards. The line parted when but 320 fathoms had been hauled in. This line was new. It was a calm time and the sea was smooth.

Condemned and threw overboard 672 lbs. of navy biscuits, utterly destroyed by weevil, all of which was new bread, part of it brought out in this vessel, the balance in the store-ship direct from home, and from which we received provisions at Porto Praya.

At night the sea was very phosphorescent, and in places which had been disturbed by catspaws it had every appearance of surf. Porpoises, and other fish breaking the water, were at first reported by the lookouts as lights.

February 10.—Examining and picking over the ship's biscuit, much of which is infested with weevil. The bread rooms are in the ward-room and cabin, and are dry.

Mr. Danels relieved Mr. Mayo, who had been assisting the master since we sailed from the United States in making observations and computations especially required for this cruise. At 8h. a. m., in 24° N., $15\frac{1}{2}^{\circ}$ W., a light breeze made from SSW.

February 11.—Took temperature soundings with all sails furled.

February 12.—At 2h. a. m., took the trades, moderate (4) from S. by E., in latitude $1^{\circ} 35'$ N., longitude $15^{\circ} 53'$ W., the breeze which sprang up from SSW. on the morning of the 10th having got to the eastward of S. Examined and put new pegs in the chain cables, which came up dry and clean from their lockers. At 4h. 20m. p. m., large broad spread trade clouds came up, and changed the direction of the wind, which had been from S. and SSE. during the day to ESE., until these clouds passed over, when the wind steadied at SE.

TRITON'S BANK.

February 13.—At 0h. 20m. a. m., crossed the equator in $16^{\circ} 58' 45'$ W., and entered the volcanic region for the third time.

At 10h. a. m., commenced sounding, under reduced sail, in search of

Triton's Bank, of which the following account is given on page 82 of Laurie's Ethiopic Directory, London, 1845 :

“ Captain Proudfoot, in the ship *Triton*, from Calcutta to Gibraltar, passed over a shoal on the 18th of December, 1816, in latitude 0° 32' S. and longitude 17° 37' W., by mean of two chronometers, adjusted at St. Helena to Captain Horsburgh's longitude. [This corrected would be about 17° 46'.] It appeared to extend in an east and west direction three miles, and in a north and south direction one mile. *Sounded in 23 fathoms brown sand ; saw no appearance of breakers.*”

There has been no confirmation of this alleged discovery since 1816. At 3h. p. m., being on the position assigned to this shoal, furled sail, took temperature soundings, and made a deep sea cast from a boat, using one 32-pound shot and waxed line, when Mr. Renshaw thought he got bottom at 2,840 fathoms ; when he held on to the line and tried current observations. The weather was clear whilst we were sounding.

FEBRUARY 13, 1852.

Latitude 0° 31' 51" S., ☉ m.; longitude 17° 45' 23" W., ☉ p. m.

BOAT SOUNDING.—MR. RENSHAW.

Fathoms.	Time P. M.			Intervals.	Fathoms.	Time P. M.			Intervals.
	<i>h.</i>	<i>m.</i>	<i>s.</i>	<i>m.</i> <i>s.</i>		<i>h.</i>	<i>m.</i>	<i>s.</i>	<i>m.</i> <i>s.</i>
Started...	2	49	44		1,600	3	32	7	3 32
100	2	50	54	1 10	1,700	3	35	37	3 30
200	2	52	28	1 34	1,800	3	39	23	3 46
300	2	54	15	1 47	1,900	3	43	48	4 25
400	2	56	20	2 5	2,000	3	47	27	3 39
500	2	58	35	2 15	2,100	3	51	38	4 11
600	3	1	4	2 29	2,200	3	55	39	4 1
700	3	3	33	2 29	2,300	3	59	42	4 3
800	3	6	11	2 38	Stopped line.				
900	3	9	4	2 53	Started...	4	2	9	
1,000	3	11	59	2 55	2,400	4	5	44	3 35
1,100	3	15	9	3 10	2,500	4	9	43	3 59
1,200	3	18	19	3 10	2,600	4	13	45	4 2
1,300	3	21	35	3 16	2,700	4	18	0	4 15
1,400	3	25	5	3 30	2,800	4	23	47	5 47
1,500	3	28	35	3 30	2,900	4	29	25	5 38

Time running, 1h. 37m. 14s. ; bottom at 2,840, in 1h. 33m. 51s.

We discovered no indication whatever of any shoal here. The observations for current, taken from the boat whilst riding to the shot, heading ESE., with gentle breeze (3) from SE., were probably influenced by the swell, which, though moderate, was somewhat irregular.

At sunset the clouds (cumulus) in the west were beautifully tinted with orange color, from 20° above the horizon to the zenith ; whilst in the east the same color extended from the horizon to 35° of altitude.

February 14.—At 6h. 30m. a. m. took temperature soundings from the brig and made a deep sea cast from the boat with one 32-pound shot and 1,000 fathoms of the fishing-line, [unwaxed ;] no bottom. The line parted before current observations could be made.

FEBRUARY 14, 1852.

Latitude 0° 43' 35" S., D a. m.; longitude 18° 45' 15" W., © a. m.

BOAT SOUNDING.—MR. RENSHAW.

Fathoms.	Time A. M.			Intervals.	Fathoms.	Time A. M.			Intervals.
	<i>h.</i>	<i>m.</i>	<i>s.</i>	<i>m.</i> <i>s.</i>		<i>h.</i>	<i>m.</i>	<i>s.</i>	<i>m.</i> <i>s.</i>
Started...	6	49	32		600	6	59	26	1 22
100	6	50	25	0 53	700	7	2	15	2 49
200	6	51	45	1 20	800	7	5	15	3 0
300	6	53	35	1 50	900	7	8	30	3 15
400	6	55	38	2 3	1,000	7	11	45	3 15
500	6	58	4	2 26					

Line parted; time running, 22m. 13s.; no bottom.

At 4h. 30m. p. m., the sun was obscured to us, but shining upon the water at a distance, for a little while had somewhat the appearance of surf. A long broken swell from the southward.

BOUVET'S SANDY ISLAND.

February 15.—At 6h. p. m., we were in the position assigned in 1761 to Bouvet's sandy island, of which the following account is given on p. 81 of Laurie's Ethiopic Directory, London, 1845:

"On the 3d of May, 1761, *Le Vaillant*, Captain *Bouvet*, about 1 p. m., saw a *small sandy island*, which bore N. by E. The latitude by the reckoning at noon was about 23' south, and their longitude, reckoned from the sight of Ferro island, which they made on the 8th of April, was about 19° 10' west." Furl'd sail, took good temperature soundings from the brig, and sounded from a boat with one 32-pound shot, unwaxed line, to 1,500 fathoms' depth, without getting bottom.

FEBRUARY 15, 1852.

Latitude 0° 26' 0" S., © m.; longitude 19° 9' 30" W., ♀ p. m.

BOAT SOUNDING.—MR. MAYO.

Fathoms.	Time P. M.			Intervals.	Fathoms.	Time P. M.			Intervals.
	<i>h.</i>	<i>m.</i>	<i>s.</i>	<i>m.</i> <i>s.</i>		<i>h.</i>	<i>m.</i>	<i>s.</i>	<i>m.</i> <i>s.</i>
Started...	5	56	11		800	6	12	48	2 52
100	5	57	12	1 1	900	6	15	51	3 3
200	5	58	39	1 27	1,000	6	19	6	3 15
300	6	0	25	1 46	1,100	6	22	29	3 23
400	6	2	26	2 1	1,200	6	25	58	3 29
500	6	4	40	2 14	1,300	6	29	37	3 39
600	6	7	13	2 33	1,400	6	33	24	3 47
700	6	9	56	2 43	1,500	6	37	15	3 51

Time running, 41m. 4s.; no bottom.

Had extra lookouts, and made a careful examination from aloft with a spyglass without seeing anything of a “sandy island,” or any appearance of any shoal or danger.

AQUILA REEF, OR SHOCK.

February 16.—When we rounded to, at 3 p. m., to furl sail and sound, the sholes of albicore and bonito, which had been keeping up with the vessel, immediately disappeared. Repeated the temperature observations. The results differ. There was a long swell from northward and eastward, and the lines came in much inclined. Those of the second trial, when the cylinder had cooled, are lower than the results got in the first trial. Mr. Hall (officer of the boat) reports that there was certainly no bottom at 1,960 fathoms, using one shot and the waxed line, and it appears that the counter under-surface currents prevented his getting a good cast beyond that.

FEBRUARY 16, 1852.

Latitude 0° 22' 50" S., ☉ m.; *longitude* 21° 6' 32" W., ☉ p. m.

BOAT SOUNDING.—MR. HALL.

Fathoms.	Time P. M.			Intervals.	Fathoms.	Time P. M.			Intervals.
	<i>h.</i>	<i>m.</i>	<i>s.</i>	<i>m.</i> <i>s.</i>		<i>h.</i>	<i>m.</i>	<i>s.</i>	<i>m.</i> <i>s.</i>
Started...	2	51	51		1,300	3	21	10	3 13
100	2	52	50	0 59	1,400	3	24	29	3 19
200	2	54	17	1 27	1,500	3	27	48	3 19
300	2	55	50	1 33	1,600	3	31	19	3 31
400	2	57	44	1 54	1,700	3	34	49	3 30
500	2	59	49	2 5	1,800	3	38	21	3 32
600	3	1	18	1 29	1,900	3	42	3	3 42
700	3	3	43	2 25	1,960	3	44	0	1 57
800	3	6	16	2 33	Stopped line.				
900	3	8	58	2 42	Started...	4	26	3	
1,000	3	11	53	2 55	2,000	4	28	3	2 0
1,100	3	14	53	3 0	2,075	4	31	35	3 32
1,200	3	17	57	3 4					

Cut the line ; time running, 57m. 41s. ; no bottom at 1,960.

This current he found, from three good agreeing trials, to be E. by S. $1\frac{2}{5}$ knot per hour. It astonished Mr. Hall to see the nipper bags going to windward against wind and sea and surface current at so rapid a rate. [The foot square leaded block, to which the current log line was attached, hung by 80 fathoms of line to these nipper bags.]

This cast was made, according to good observations of the sun, in the position assigned to Aquila reef, or shock, (1831,) of which the following account is given on p. 82 of Laurie’s Ethiopic Directory, London, 1845 :

“On the 12th of April, 1831, the *Aquila*, of Scarborough, Captain John Taylor, was in latitude 0° 22' 15" S. and longitude 21° 6' 30" W., light winds and fine pleasant weather. At 40 minutes p. m., the water being very smooth, and the ship going at the rate of five knots, a loud

rumbling noise was heard under her bottom, and a sensation felt exactly like that of a vessel sliding over a rock; the rudder was so much agitated that the man who was steering could scarcely hold the wheel.

"No difference could be observed in the color of the water, nor the smallest rippling. The captain concluded at first that it must have been a rock; but after arriving in London there was not, on examination, the least sign of any rub on the copper; and it was concluded that there must have been, in the spot above mentioned, a volcanic eruption, the shock of which did not exceed 15 seconds.

The situation of the *Aquila* was very near that of the *Silhouette*, in 1754."

At 6h. p. m., passed over Le Pacifique shock, of which the following account is given on page 81 of Laurie's *Ethiopic Directory*, London, 1845:

"October 3, 1771, *Le Pacifique* frigate, Captain *Bonfils*, in a voyage from the Cote d'Or to St. Domingo, felt, at 8 p. m., a shock, or extraordinary trembling, similar to that which is felt on a vessel's grounding, or rather like that of a launch. They put back immediately and sounded, but without finding bottom. They were in latitude $0^{\circ} 42' S.$; longitude, by reckoning, $22^{\circ} 47' W.$ The sea was greatly agitated.—*M. Daussy.*"

We saw no appearance of danger, nor experienced any shock. At 2h. p. m., on the 21st of January, we passed nearly over the same spot, and near noon of that day sounded when about 9 miles NE. by N. of it with 2,125 fathoms of line without finding bottom.

February 17.—Condemned 240 pounds of very bad bread, and got 1,000 pounds of good, well baked bread from a Hamburg ship, and for less than the contract navy bread cost when delivered at Porto Praya.

CROWN REEF.

February 18.—Searching for Crown Reef, of which the following account is given in Laurie's *Ethiopic Dictionary*, London, 1845, p. 82:

"On the 9th of February, 1835, the barque *Crown*, of Liverpool, after crossing the equator with a pleasant breeze at ESE., and running at the rate of $6\frac{1}{2}$ knots, at $10\frac{3}{4}$ p. m. touched the ground and grated for a short time with the keel, as if passing over a coral reef; so soon as clear the boat was lowered down, but no bottom was found at 120 fathoms depth. The latitude of the spot was 57 minutes south, and the mean longitude, by chronometer and lunars, $23^{\circ} 19' W.$ "

At 7h. 20m. a. m. begun sounding. At 9h. 45m. a. m. took temperature soundings from the vessel, and made an up and down cast of 1,500 fathoms from a boat, without getting bottom; used one 32-pound shot and unwaxed line. There was a heavy swell, and a somewhat rough and irregular surface sea on.

FEBRUARY 18, 1852.

Latitude 1° 2' 18" S., ☉ *m.*; *longitude* 23° 17' 45" W., ☉ *a. m.*

BOAT SOUNDING.—MR. RENSRAW.

Fathoms.	Time A. M.			Intervals.	Fathoms.	Time A. M.			Intervals.
	<i>h.</i>	<i>m.</i>	<i>s.</i>	<i>m.</i> <i>s.</i>		<i>h.</i>	<i>m.</i>	<i>s.</i>	<i>m.</i> <i>s.</i>
Started...	10	20	0		800	10	39	0	3 20
100	10	21	5	1 5	900	10	42	37	3 37
200	10	22	40	1 35	1,000	10	46	18	3 41
300	10	24	30	1 50	1,100	10	50	4	3 46
400	10	26	50	2 20	1,200	10	53	59	3 55
500	10	29	34	2 44	1,300	0	0	0	0 0
600	10	32	32	2 58	1,400	11	2	27	8 28
700	10	35	40	3 8	1,500	11	7	02	4 35

Line parted; time running, 47m. 2s.; no bottom.

At 2h. p. m., when in the position assigned to Crown Reef, furled sail and sounded from a boat with 1,100 fathoms of triple-strength line and one 32-pound shot, but got no bottom. Mr. Mayo, with the boat thus anchored, made current observations, having the log line fast to the nipper bags whilst trying under currents. He thinks the surface current found was only heave of the sea. It took the shot 32m. to run down this 1,100 fathoms of this triple-strength line, (which was three times the size of the fishing-line used for deep sea casts,) and it required 1h. 13m. to reel it up in the boat. It would take much time to recover the fishing-line used for a deep sea sounding, so that this kind of line is always cut away after the cast and current observations are made, if it holds so long. It would not pay for lost time to haul in several thousand fathoms of line to recover a shot, without getting a specimen of the bottom. If time could be spared for hauling it in, and if it could be got in without parting, it would probably be too much strained for another trial. We saw no indication of a reef or shoal in this vicinity.

February 19.—At 4h. p. m. took temperature observations from the vessel, and made a cast of 1,100 fathoms triple size line up and down from a boat—no bottom.

The current observations recorded are the mean of three agreeing trials, at the given depths, made whilst the boat was anchored, by the 1,100 fathoms of this line to one 32-pound shot. At the sub-surface trials the current log line was made fast to the block itself.

At 9 p. m. passed out of the volcanic region in latitude 1° 48' S., longitude 25° W., for the last time this cruise. After giving this region a careful examination, [see general track chart,] making many deep sea soundings, searching around and sounding over or near many of the places assigned to reported volcanoes or shocks, and shoals, we have seen no sign of any danger whatever.

CHAPTER V.

Observations for variation at sea—Touch at Fernando de Noronha twice—Measure difference of longitude between it and Pernambuco—Yellow fever in Brazil—Unsuccessful search for “Vigia south of Fernando de Noronha”—Land on the Rocas reef—Determine its position, &c.—Serious errors in some previous authorities shown—Current off Cape St. Roque—Suggest explanation of the difficulty of getting round that point.

February 20.—Saw a sail. At 4h. 30m. p. m. observed several sets of azimuths of the sun, for variation, heading S. W.; then tacked and repeated the observations, heading N. E. by E. The mean result of the last sets of azimuths was 34' less than the former; then shortened sail and took temperature soundings.

The columns of the abstract log show the daily results of the observations made for determining the variation of the compass. The following table exhibits some of the differences in the results obtained by two good observers at the same time, place, and under similar circumstances, and both before and after tacking, differences of observation greater than the local deviation of the Dolphin, with no guns, iron davits, small arms, or heavy iron work near the binnacles :

Table exhibiting difference in observations, &c.

Date.	Time.	Brig's head.	Variation.		Mean.	Difference found from tacking.		Difference between the observations on the same tack.	
			Master.	Assistant.		Master.	Assistant.		
January 25.....	<i>h. m.</i> 7 30 a. m.	S. by W.....	W. O ' 12 36	W. O ' 11 50	O ' 12 13	O ' +0 26	O ' -0 25	O ' -0 46	
Do.....	8 0 a. m.	NE.....	13 2	11 25	12 13			-1 37	
January 26.....	7 30 a. m.	NE. by E....	{ 14 27 } 14 58	13 28	14 18	{ +0 9 } -0 22	-0 14	{ -0 59 } -1 30	
Do.....	8 0 a. m.	S. by W.....	14 36	13 14	13 55			-1 22	
January 27.....	7 30 a. m.	S. by W.....	14 26	14 56	14 41	+0 16	-1 34	+0 30	
Do.....	8 0 a. m.	NE.....	14 42	13 22	14 2			-1 20	
February 7.....	7 30 a. m.	NE. by E....	17 33	18 8	17 50	-0 27	+0 21	+0 35	
Do.....	7 30 a. m.	SSW.....	17 6	18 29	17 47			+1 23	
February 20.....	7 30 a. m.	WSW.....	15 3	14 5	14 34			-0 58	
Do.....	7 30 a. m.	WSW.....	14 27	13 33	14 0			-0 54	
Do.....	4 30 p. m.	SW.....	14 4	13 57	14 0	-0 30	-0 38	-0 7	
Do.....	4 30 p. m.	NE. by E....	13 34	13 19	13 26			-0 15	
February 21.....	4 0 p. m.	SW. by W...	12 47	13 36	13 11			+0 49	

February 21.—At 10h. a. m. furled sail and took temperature soundings from the brig. Cast with 1,100 fathoms triple size line without getting bottom, and made current observations from a boat. The weather was favorable, and the log line, when trying the under surface currents, was attached to the current block. Lost the patent log at night; supposed to have been bitten off by a fish.

February 22.—Saw two sail. At 2h. 30m. p. m. furled sail and took temperature soundings; got an up and down cast from a boat, using one 32-pound shot and 700 fathoms triple size line; and with the boat thus anchored made current observations. At 4 p. m., whilst sounding, saw from the deck the peak of Fernando de Noronha, bearing S. 84° W., (true,) distant 40 nautical miles. Our position at the time was deduced from good observations of the sun at noon for latitude, and by good observations of the moon and Venus at twilight that evening, which gave agreeing results for longitude. This position has been corrected for the error of the mean of our chronometers, ascertained two days afterwards on the meridian of the citadel of Fernando, (in longitude $34^{\circ} 24' 27''$ W.,) from our measurement of the difference of longitude between this citadel and Fort Picao in longitude $34^{\circ} 51' 45''$ W.—(Raper, 1849.)

The weather looked threatening at times this afternoon, but the visibility of distant objects is marked in the log as very great.

February 23.—Begins squally with large swell from SE. At 12h. 25m. p. m. saw the peak of Fernando from aloft, on the lee bow. Brought it right ahead and got its compass bearing W. by S. $\frac{3}{4}$ S. Our position in latitude from observations of the sun at noon, and in longitude from the mean of a. m. and p. m. sights, subsequently corrected for error of chronometers on the meridian of the citadel of Fernando; made the distance of the peak again just 40 miles, bearing WSW. (true.) At 10h. 40m. p. m. anchored in the roadstead, off the citadel, in 16 fathoms water.

February 24.—Bearings from anchorage. Northern Twin, S. 60° W. Peak, S. $21^{\circ} 30'$ W. Mount St. Michaels, S. 85° E. At sunrise procured a catamaran and landed a party through a considerable surf at the landing place, which is a police station on the eastern side of Chaloup bay. Lieutenant Commanding Lee called upon the governor, who gave us permission to make some astronomical observations, and sold us a little fresh beef for the crew, at a high price, from the hospital stores. The governor, an infirm old colonel of the Brazilian army, would only consent, according to his interpreter, to let us have a few hundred gallons of water, and failed to let the convicts fill our casks, (as stipulated, and for which they were to be paid,) for our boats to haul off through the surf at Water Cove, on the west side of the citadel, where the government has a well. So our boats returned without any water to-day. Mr. Barbot and Mr. Danels made observations at the citadel, with sextants and artificial horizon for rating our chronometers. Learned on enquiry of the governor, that there are 103 officers and soldiers, 310 prisoners, and 287 other persons, men, women, and children, on the island, which is beautiful and fertile, though but little cultivated. In other hands than those of the Brazilians, and used for other purposes than an abode for convicts, navigation might have

the benefit of a first class light on this island, and an abundant supply of water and refreshments—such as beef, poultry, vegetables, and fruit. Since the yellow fever broke out, several years ago, along the coast of Brazil, which was previously exempt from that scourge, and has now become a fixed local disease in the Brazilian sea ports, this island becomes daily more important as a convenient place to touch at for supplies. As a coal depot for our steam navy its importance cannot be too highly appreciated. The harbor admits of easy improvement, and the island of easy defence.

The valuable discoveries of Lieutenant Maury, U. S. navy, have caused this part of the sea to be much more frequented than formerly. Vessels bound to the East Indies or to California, find the best winds and make the quickest passages by using Lieutenant Maury's wind and current charts, and avoiding the African or eastern, and adopting his American or western route over the Atlantic. Whilst the policy of the United States has hitherto avoided the trouble and expense of distant colonial possessions, it must always be a matter of much interest to us that such convenient islands as the Cape de Verde group, and Fernando de Noronha, &c., should be in the possession of nations having the necessary energy and disposition to make them most useful to the wants of commerce. Called again upon the governor and found him more accommodating. His interpreter, a vicious prisoner, made the misunderstanding yesterday.

February 25 and 26.—In a day and a half, with our small boats, a cutter and two whale boats, got off about 1,500 gallons of sweet water, hauled off through the surf in breakers, filled by the convicts. Observed by heaving the log hourly, that the greatest set of tide in the roadstead was $\frac{1}{8}$ of a knot westerly. The usual precautions to keep the crew from getting liquor are as necessary here as elsewhere, though this island is under military police.

February 27.—Got underway at daylight. Boarded a Russian yacht just from Pernambuco, and learned that it is healthy there, though there is yellow fever at Para, and other Brazilian ports. At 11h. 40m. a. m., when off the west end of the island, a lookout reported a rock close on the lee beam, and in plain sight from the deck. Hove to, lowered a boat, and dispatched Mr. Dancels to examine it. The supposed rock proved to be two large turtles, somehow locked together, which slowly went down when the boat got up to them. This is another illustration of the many ways in which so many vigias happen to get on the charts. Saw one sail. Vivid sheet lightning in the east at sunset.

For 4 days in November, 8 days in December, (1851,) 17 days in January, and 16 days in February, (1852,) the reckoning was carefully made up at noon from the run both by patent log and common log.

The daily difference was sometimes as much as 11 miles, though the judgment of the officer of the deck (who always hove the log) was insensibly influenced by habitual comparison with the patent log. The average daily difference was 3 or 4 miles. The patent log sometimes showed least, but generally most run; agreed closest with the measurements by astronomical observations, and was always adopted. More attention should be paid to this important instrument. It should be

carefully constructed and tested, and commonly used when the wind is not too light.

February 28.—Scrubbed paint work. At 3h. 30m. p. m., with all sails furled, took temperature soundings. The lines came in with but little inclination. Mr. Hall sounded from a boat with 1,100 fathoms triple sized line, (viz: three times the size of the fishing line used in deep sea soundings,) and one armed 32-pound lead; no bottom. The surface current is the result of five good agreeing trials, three of them with a light air from southward and eastward, and the others with a light air from northward and eastward.

The current at 10, and at 80 fathoms, is the result of three good agreeing trials in each case. By heaving the log from the boat whilst it was pulling back at an even rate, and noting the time it was returning, found that the brig had drifted $1\frac{4}{5}$ knots during the two hours the boat had been absent. The boat left the brig after sail was furled, and returned before it was loosed again. This, though but little more than half the rate of surface current found by the boat, agrees with the average rate of current deduced from the point of departure on the 27th, and the position at noon on the 29th.

February 29.—At 5h. 30m. a. m., clewed up all sail, lowered a boat to try currents, then furled all sail, and took temperatures from the brig. Mr. Renshaw got bottom with one 32-pound shot and waxed line at 2490 fathoms, and reports the cast a very satisfactory one.

FEBRUARY 29, 1852.

Latitude $5^{\circ} 32' 41''$ S., \odot m.; *longitude* $32^{\circ} 43' 52''$ W., \odot a. m.

BOAT SOUNDING.—MR. RENSHAW.

Fathoms.	Time A. M.			Intervals.	Fathoms.	Time A. M.			Intervals.
	<i>h.</i>	<i>m.</i>	<i>s.</i>	<i>m.</i> <i>s.</i>		<i>h.</i>	<i>m.</i>	<i>s.</i>	<i>m.</i> <i>s.</i>
Started...	5	48	43		1,300	6	20	12	3 27
100	5	49	52	1 9	1,400	6	23	52	3 40
200	5	51	25	1 33	1,500	6	27	38	3 46
300	5	53	4	1 39	1,600	6	31	25	3 47
400	5	55	1	1 57	1,700	6	35	25	4 0
500	5	57	11	2 10	1,800	6	39	32	4 7
600	5	59	30	2 19	1,900	6	43	45	4 13
700	6	1	55	2 25	2,000	6	48	0	4 15
800	6	4	38	2 43	2,100	6	52	23	4 23
900	6	7	27	2 49	2,200	6	56	56	4 33
1,000	6	10	20	2 53	2,300	7	1	42	4 46
1,100	6	13	27	3 7	2,400	7	6	22	4 40
1,200	6	16	45	3 18	2,490	7	11	0	4 38

Bottom; time running, 1h. 22m. 17s.

The surface current observations are the mean of three agreeing trials made whilst the boat rode steadily to her shot and long cable, which inclined but slightly. Saw one sail.

March 1.—At 6h. a. m. clewed up all sail, lowered a boat to try currents, then furled all sail and took temperature soundings from the brig; the lines came up with considerable inclination. At the 400

fathom cast, the line took 9m. to run out, and 46m. to come in on the winch.

At 8h. 30m. made sail, and hove to for the boat, which having the triple sized line to haul in, which is strong enough to be hauled in, takes more time than when sounding with the single fishing line. Mr. Mayo got no bottom, sounding from the boat with 1,100 fathoms of triple size fishing line, which ran out with a 32-pound lead armed with soap in 32m., and was reeled up in 1h. 32m. The current observations are the mean of three trials in each case, and made when the boat had settled to the shot after the cast was got. During these trials, though the wind was moderate (4) and sea rough from east, the boat was apparently steady, for the water passed freely by her. At 3h. 16m. p. m., furled sail, with the land about Olinda in sight, and took temperature observations. Anchored a boat with a kedge in 45 fathoms water, coral and gravel bottom, and tried the currents, making three good trials with agreeing results each time. The sea was rather rough.

PERNAMBUCO.

March 2.—At 1 p. m. anchored inside the reef, using the pilot's launch and crew. Waited on our consul, and found there was yellow fever here, with fatal cases on board the vessels.

March 3.—The crew scrubbed their hammocks, bags, and clothes, with fresh water—a good sanitary measure. The English monthly mail steamer from Southampton to Rio, which touches at the Cape de Verdes, arrived and anchored in the outer anchorage. Mr. Barbot and Mr. Danels took sights at the marine arsenal, (not having been able to get into Fort Picao, which is in a dilapidated condition,) to give the difference of longitude between the citadel at Fernando de Noronha and this place. Business is done here in a very slow manner, and our supplies, of which a prompt delivery was promised, were sent off very tardily. The commander of a Brazilian man-of-war in harbor to-day, replied to the remark that, while our vessels came to Brazil, its navy did not visit the United States, with the acknowledgment that the latter was necessary at home—perhaps to prevent insurrection in a population of largely mixed races, viz, Portugese, Indian, and African. Sent a boat for, and received an official visit from our consul. The contractor delivered a part of the provisions and wood; the latter small green sticks.

March 4.—The temperature of the water inside of the reef appears to be influenced by the tides, and is lowest at low water.

The Brazilian mail steamer arrived to-day from Para, and reports that there is no yellow fever there. The Russian yacht which we met at Fernando de Noronha, just from this place, informed us that there was no yellow fever here, but that it prevailed at Para. Having filled up with water, (which is excellent,) and received the greater part of the provisions and wood, warped down near the bar of the reef, and crossing it at high water under sail, beat out to the outer anchorage, to get away from the fever on board the shipping, and to wait for the balance of the stores.

March 5, 6, 7.—Received some bullocks, vegetables, limes, &c., for the crew, and the balance of the ship's stores, on the afternoon of the

7th, and immediately got under way and beat off the coast. The crew necessarily received no liberty here, in consequence of the fever, which their indulgence or exposure on shore would certainly have introduced on board.

But the fresh provisions which they have had will be of much benefit to their health. Clear and soft water was delivered to us in the tank canoes, in which it was brought down the river; and the provisions and stores were brought off in shore boats, to prevent exposure of our crew.

March 8.—Furled sail and took temperature soundings. Got bottom, with a shot, at 286 fathoms, from the boat, which drifted too fast to allow of trying the currents. A heavy swell from the southward and eastward. Mr. Renshaw relieved Mr. Danels, and will, in turn, perform the duty of assistant master for one month.

March 9.—Took temperature sounding. Tried currents from boat during a lull. Sea rough; observations not very good. Cast with a triple-strength line and one 32-pound armed lead; no bottom at 900 fathoms up and down.

VIGIA SOUTH OF FERNANDO DE NORONHA.

March 10.—Sounding, and searching for a "vigia" laid down on the admiralty chart of 1836, in latitude $4^{\circ} 42'$ to $4^{\circ} 45'$ S., and longitude $32^{\circ} 43'$ to $32^{\circ} 46'$ W., over which location we passed, according to our dead reckoning, on the afternoon of the 28th February, when going to Pernambuco. At 3 p. m., being in the position assigned to this vigia, furled sail, took temperature soundings from on board, and sounded from a boat with 1,250 fathoms of line without getting bottom, and tried the current. The sea was rough, breeze fresh, and observations indifferent. Saw no indication of any shoal or danger within the radius of our vision from this position. (See track chart.)

The transparency of the sea, as found from the boat, was two fathoms less than that observed from the brig.

March 11.—At daylight saw the peak of Fernando de Noronha, bearing $NE\frac{1}{2}N.$, distant 32 miles. At 3h. 35m. p. m. anchored off the citadel, in 14 fathoms water. The Brazilian government's transport brig, which keeps up the communication with Pernambuco, from whence the supplies for this island are brought, sailed, as we came in, with the ex-governor on board. As Pernambuco bears from Fernando de Noronha about $SSW\frac{1}{2}W.$, (distant 300 miles,) the southeast trades make a fair, or nearly fair, wind both ways. The passage is usually made within four days from the island, and three days from the main. Our boat could not land, owing to the surf; and we could not obtain a catamaran, as they were all kept hauled up at the landing by the new authorities. There is an evident disposition to discourage vessels from touching here.

March 12.—Mr. Barbot and Mr. Renshaw took observations at the citadel, to determine the rates of our chronometers since we left here, and the difference of longitude from the marine arsenal landing, at Pernambuco. Set up the rigging, but did not black it down, though this was much needed, from a disposition not to expose the crew, who were just from a yellow fever port.

Longitude of the citadel Fernando de Noronha, from observations made by the officers of the hydrographical party, in the United States surveying brig Dolphin, Lieutenant S. Phillips Lee, U. S. N., commanding, February and March, 1852.

	Difference of longitude by Dolphin's chronometers.				Result.	
	T. Cotterell & Co.	Charles Frodsham.	Parkinson & Frodsham.	Dent.	Time.	Arc.
	865	1,783	2,465	1,879		
	m. s. 9 51.1 9 49.5	m. s. 9 50.7 9 50.5	m. s. 9 51.4 9 50.5	m. s. 9 50.3 9 49.4	m. s.	° ' "
From Fernando de Noronha to Pernambuco, (8 days).....					9 50.4	2 27 36
From Pernambuco to Fernando de Noronha, (5 days).....						
Difference of longitude between marine arsenal landing, Pernambuco, and citadel Fernando de Noronha; (greatest difference of chronometers 2s.....)	.....Mean.....					0 0 18
Fort Picao, E. of arsenal landing, Pernambuco, (admiralty chart, 1817).....						2 27 18
Difference of longitude between Fort Picao, Pernambuco, and citadel Fernando de Noronha.....						34 51 45
Longitude of Fort Picao, (Raper's Navigation, 1849).....						32 24 27
Citadel of Fernando de Noronha, W. of Greenwich.....						

March 13.—Got under way for the Rocas reef. At 10h. 20m. a. m., the weather misty, lost sight of the peak from the deck, having run from it, by the log, $25\frac{1}{2}$ miles, $W\frac{1}{2}S$. At 11h. 5m. lost sight of it from aloft, having run three miles further. At noon furled sail, took temperature soundings from the brig, (which are recorded in the order in which they were made,) sounded and tried currents from a boat, whilst anchored with a 32-pound shot and 2,150 fathoms of line, [waxed,] at which depth Mr. Danels reported bottom.

MARCH 13, 1852.

Latitude $3^{\circ} 51' 41'' S.$, $\odot m.$; longitude $33^{\circ} 2' 14'' W.$, $\odot p. m.$

BOAT SOUNDING.—MR. DANELS.

Fathoms.	Time P. M.			Intervals.	Fathoms.	Time P. M.			Intervals.
	<i>h.</i>	<i>m.</i>	<i>s.</i>	<i>m.</i> <i>s.</i>		<i>h.</i>	<i>m.</i>	<i>s.</i>	<i>m.</i> <i>s.</i>
Started...	12	7	14		1,200	12	34	26	3 7
100	12	8	17	1 3	1,300	12	37	37	3 11
200	12	9	39	1 22	1,400	12	41	1	3 24
300	12	11	22	1 43	1,500	12	44	33	3 32
400	12	13	15	1 53	1,600	12	48	3	3 30
500	12	15	21	2 6	1,700	12	51	33	3 30
600	12	17	38	2 17	1,800	12	55	15	3 42
700	12	20	7	2 29	1,900	12	59	17	4 2
800	12	22	35	2 28	2,000	1	3	7	3 50
900	12	25	22	2 47	2,100	1	6	58	3 51
1,000	12	28	12	2 50	2,180	1	11	48	4 50
1,100	12	31	19	3 7					

Time running, 1h. 4m. 34s; bottom at 2,150, in 1h. 2m. 45s.

The current observations were not good, as the sea was rather high. The log was hove from the boat as it returned and the time of returning noted, which showed that the brig had drifted northwest two miles in 2h. 45m., whilst lying to under bare poles and square yards.

March 14.—At 8 a. m., four sail in sight; mustered the crew, and Mr. Barbot read the articles of war to the officers and crew, which had been necessarily omitted on the first Sunday of this month. At 2h. 30m. p. m., large flocks of black gulls in sight, and a few minutes afterwards breakers (the Rocas) were reported from the topsail yard, distant 10 miles. Hove to and sounded; no bottom at 70 fathoms up and down. Filled away under easy sail and sounded during the afternoon. At 6h. p. m. anchored under the lee of the Rocas, (Sand Island bearing, per compass, ESE., distant $1\frac{1}{2}$ miles,) in 18 fathoms water, and veered to 90 fathoms on the stream chain and cable. Sounded round the vessel, in a boat, and found the bottom to be of flat coral, and the depth from 18 to 19 fathoms water.

March 15.—Saw a brig standing to the northward and westward. At 7 a. m. Lieutenant Commanding Lee and Mr. Elliott with the instruments in one boat, and Mr. Renshaw in the other, left for the reef. The boats sounded to and along the reef, which they examined, one on the northern, and the other on the western side, for a landing; but the

sea everywhere broke badly, as if the rollers passed over jagged coral. Towards high water Mr. Renshaw found that it looked much smoother under the lee of Sand island, and afterwards, when both boats were there examining the reef, finding his boat already in the surf, pulled in and effected the first landing with ease and safety.

When the tide went out and left the reef bare it appeared flat, showing many crevices and small openings, which had caused the rollers to break as though they were striking against pointed pieces of coral. Measured a base of 242 fathoms length on Sand island, made observations for time and azimuth, and took some horizontal angles and bearings. At sunset dragged the boats safely over the bare reef, and pulled without difficulty through the surf. Mr. Renshaw and others of the shore-party came off suffering with optholmy.

March 16.—In the morning, Lieutenant Commanding Lee, Mr. Barbot, Mr. Mayo, and Mr. Elliott, with a small party of seamen, landed on the Rocas, using the small metallic life-boat to cross on the reef, to prevent injury to the bottoms of the whale boats. Put up signals and determined the extent of the reef, and of the islands and prominent rocks. Took some astronomical and tidal observations, and returned on board at sunset. The current yesterday and to-day at our anchorage set from between SSE. and E. by S. from $\frac{1}{10}$ to $\frac{1}{8}$ knots per hour. The commanding officer and several of the shore-party affected by optholmy, caused by the great glare of the sand islands and heat of a vertical sun.

March 17.—Squally and rainy. Got underway. Employed until the 28th in computing some of the observations, making a plat of the reef, and trying currents in its vicinity, ascertaining that there was no visible danger within ten or fifteen miles of the reef, and in endeavoring to determine the extent of soundings from the reef. Squally weather, baffling winds, calms and currents, prevented the full execution of this last object.

The centre of this low and dangerous reef is in latitude $3^{\circ} 51' 27''$ south, and longitude $33^{\circ} 48' 57''$ west, and is 84 miles due west of the peak of Fernando de Noronha. The reef extends about $1\frac{1}{4}$ miles in latitude, and nearly $1\frac{3}{4}$ miles in longitude, and is covered at high water, with the exception of Sand and Grass islands on the west, and the scattered rocks on the south and east sides. These objects are from ten to fifteen feet above the reef, which is formed of coral, generally level, though with many holes in it. In case of a vessel striking on the weather side of it, (SE.,) the chance of saving life would be small. When about ten miles off, the breakers were first seen from aloft; then the two low islands and the black rock soon appear. Sea birds abound, but there is no guano, owing to the rains. The eggs of the gulls were plentiful and good. There is no wood or fresh water. There is bad anchorage from one to two miles northwest of Sand island in from 15 to 18 fathoms, coral bottom. We found coral bottom at 15 fathoms, 6 miles east of the reef, but no bottom at 30 fathoms, $2\frac{1}{2}$ miles NNE., nor at 70 fathoms, 4 miles SW. of it.

The tide rises about 5 feet. The lagoon, in which we saw many turtle, has from 1 to 4 feet water at low tide, and shows white from the masthead at 4 or 5 miles distance. The anchors and cable on the

SW. part of the reef and the remains of a wrecked vessel on the N. E. side of Grass island, appear to have been on the reef a long time. A light-house on this reef would be very useful to vessels. The vessel which the Brazilian government uses to keep up frequent communication between Pernambuco and Fernando de Noronha, might readily deliver to the keepers all the supplies they required.

The latitude, longitude, and variation, determined at the astronomical station at the end of the base-line on the north end of Sand Island, (Rocas) are as follows:

Difference of longitude by Dolphin's chronometers.					Result.	
T. Cotterell & Co.	Charles Frodsham.	Parkinson & Frodsham.	Dent.		Time.	Arc.
865	1,783	2,465	1,879			
m. s.	m. s.	m. s.	m. s.	m. s.	m. s.	0 ' "
5 40.5	5 39	5 39.4	5 40.3			
From Fernando de Noronha to Rocas, (4 days).....						
Difference of longitude between citadel Fernando de Noronha and station north end of Sand island, Rocas ; (greatest difference of chronometers, 1s.5.).....					5 39.8	1 24 57
.....Mean.....						
Longitude of station on north end of Sand island, Rocas, west of Greenwich.....						33 49 24
Centre of reef east of our position by our survey.....						0 0 27
Centre of Rocas reef west of Greenwich						33 48 57

Latitude.

Latitude of north end of Sand island, Rocas, from 3 meridian, 6 circum-meridian alts. ☉, and 2 meridian alts. D, by three observers ; (greatest difference 19" of arc).....	30 50' 56" S.
Centre of reef south of above position by our survey.....	00 0' 31"
Latitude of centre of reef.....	30 51' 27" S.

Variation.

Variation (north end of Sand island) mean of seventeen observations ☉.....	100 54' 20" W.
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The following table gives the position heretofore assigned to the Rocas reef, by different authorities :

Authority.				Assigned position.					
Name.	Date.	Edition.	Page in table.	Latitude.			Longitude W. of Greenwich.		
				°	'	"	°	'	"
Purdy's Directory	London, 1845	3d	14	3	55	0 S.	33	30	0 W.
Bowditch's Navigator	N. York, 1849	19th	338	3	52	0 S.	33	10	0 W.
Dodo	N. York, 1849	19th	355	3	55	0 S.	33	10	0 W.
Dodo	N. York, 1852	21st	338	3	52	0 S.	33	10	0 W.
Dodo	N. York, 1852	21st	355	3	55	0 S.	33	44	0 W.
Blunt's Coast Pilot	N. York, 1850	16th	640	3	55	0 S.	33	10	0 W.
Raper's Navigation	London, 1849	3d	45	3	55	0 S.	33	44	0 W.

The discrepancy in two different tables in the same edition of Bowditch, for 1852, is 3m. in latitude, and 34m. in longitude. Blunt's Coast Pilot, for 1850, places this low and dangerous reef 39m. east of its true position in longitude.

The current, in the vicinity of this reef, sets from between SE. by E. and E. by N., at the rate of from eight-tenths to one and five-tenths knots per hour, as found by the daily difference between our position by reckoning when running by the patent log, and that deduced from good astronomical observations. The surface current, found by trials on four different days, during the same period, sets from between SE. and E. by N. from nine-tenths to one and four-tenths knots per hour. At our anchorage, under the lee of Sand Island, the tide ran from two-tenths to eight-tenths knots per hour, setting from between SSE. and E. by N. towards the northward and westward. The current observations, recorded on the 22d in the abstract, were each the result of seven agreeing trials, with a gentle breeze (3) and smooth sea. On the 25th it was calm and the current observation was very good. On the 27th the sea was smooth and wind light, when the current observations were made; but on the 28th the sea was rough and the wind moderate, (4,) which made the set of the current appear larger than it was. Mr. Hall sounded, from a boat, with one shot and waxed line, which parted at 2,440 fathoms.

MARCH 28, 1852.

Latitude 4° 19' 55" S., ☉ m.; longitude 34° 45' 40" W., ☉ p. m.

BOAT SOUNDING.—MR. HALL.

Fathoms.	Time P. M.			Intervals.	Fathoms.	Time P. M.			Intervals.
	<i>h.</i>	<i>m.</i>	<i>s.</i>	<i>m.</i> <i>s.</i>		<i>h.</i>	<i>m.</i>	<i>s.</i>	<i>m.</i> <i>s.</i>
Started...	3	13	40		1,300	0	0	0	0 0
100	3	14	40	1 0	1,400	5	45	6	6 0
200	3	16	0	1 20	1,500	5	48	18	3 12
300	3	17	38	1 38	1,600	5	51	29	3 11
400	3	19	27	1 49	1,700	5	54	45	3 16
500	3	21	27	2 0	1,800	5	57	59	3 14
600	3	23	35	2 8	1,900	4	1	23	3 24
700	3	25	49	2 14	2,000	4	4	48	3 25
800	3	28	14	2 25	2,100	4	8	31	3 43
900	3	30	46	2 32	2,200	0	0	0	0 0
1,000	3	33	23	2 37	2,300	4	15	10	6 39
1,100	3	36	8	2 45	2,400	4	18	48	3 38
1,200	3	39	6	2 58	2,440	4	20	30	1 42

Line parted ; time running, 1*h.* 6*m.* 50*s.* ; no bottom.

The transparency found from the boat was one fathom less. With blocks of the same size and whiteness, sea, sun, and sky equally clear, the transparency found from the boat should be the most. One observer sees better than another, and there is some difference in observing from the clear or shady side of a vessel.

March 29.—The current observations made by Mr. Hall at 6*h.* a. m., from a whale boat anchored with 600 fathoms of triple size line and one 32-pound shot, were reported good, the wind being light and sea smooth. Saw one sail. At 3*h.* 30*m.* p. m. the rain was observed to fall in patches, with small intervals in which no rain fell.

March 30.—Experienced light variable airs, principally from the southward and eastward, and calms, with frequent small squalls. At 6 a. m. took temperatures from the brig, and sounded from a boat with 1,000 fathoms triple size line, and one 32-pound shot, without getting bottom, and tried the current whilst thus riding to the shot with this scope of line. The sea was smooth, the wind light (2) from E. by S., the boat heading N. $\frac{3}{4}$ E., when by nine agreeing trials of the surface current with the light log line, Mr. Danels found the surface current setting S. $\frac{1}{2}$ W. 2 knots per hour. After reeling up the line, the brig bore S. $\frac{1}{2}$ W. from the boat, distant $1\frac{1}{4}$ miles, as found by heaving the log from the boat, and by timing its return to the brig. The brig was laid to, heading to the northward, sails furled, yards square, and helm a-port. The temperature lines came up tending ahead, indicating that the brig was going to the southward, as her bearing from the boat showed she had done, though the light log, hove several times from the vessel, showed that she went to the northward $1\frac{3}{4}$ knots during this time. The difference between the observations, which were many and good, and reckoning, which was necessarily uncertain in such weather, showed a current of $1\frac{3}{4}$ knots per hour, setting west. If the current observations made in the boat were correct, we

were probably in an eddy current, or influenced by tide. The brig's position at this time was about 25 miles NE. of bottom at 25 fathoms on the flats of St. Roque, by the admiralty chart of 1833.

March 31.—At 6h. a. m. took temperature soundings from brig, with yards square, sails furled, and heading to the northward. The air was quite light with, during the latter part of the time, occasional small rain squalls, generally from the westward. Mr. Mayo sounded from the boat, and thinks he got bottom at 2,700 fathoms, using one 32-pound shot and the waxed line. The line parted before he could make any satisfactory current observations.

MARCH 31, 1852.

Latitude 4° 24' 18" S., \odot m.; *longitude* 35° 23' 21" W., *21 a. m.*

BOAT SOUNDING.—MR. MAYO.

Fathoms.	Time A. M.			Intervals.	Fathoms.	Time A. M.			Intervals.		
	h.	m.	s.	m.	s.		h.	m.	s.	m.	s.
Started...	5	55	11			1,500	6	37	47	7	34
100	5	56	10	0	59	1,600	6	41	40	3	53
200	5	57	30	1	20	1,700	6	45	45	4	5
300	5	59	37	2	7	1,800	6	49	29	3	44
400	6	2	0	2	23	1,900	6	53	20	3	51
500	6	4	29	2	29	2,000	6	56	52	3	32
600	6	7	15	2	46	2,100	7	0	55	4	3
700	6	10	11	2	56	2,200	7	4	50	3	55
800	6	13	17	3	6	2,300	7	8	28	3	38
900	6	16	30	3	13	2,400	7	11	24	2	56
1,000	6	19	44	3	14	2,500	7	15	17	3	53
1,100	6	23	4	3	20	2,600	7	19	29	4	12
1,200	6	26	37	3	33	2,700	7	24	8	4	39
1,300	6	30	13	3	36	2,800	7	28	25	4	17
1,400	0	0	0	0	0						

Time running, 1h. 33m. 14s.; Bottom at 2,700 fathoms, in 1h. 28m. 57s.

The boat when sounding, heading SE. with two oars pulling when necessary to keep the line running up and down. The sea was smooth with a slight swell, and favorable for sounding. It was nearly calm. The boat experienced during the first part of the time some small puffs of air from the southward and eastward. The boat was gone 2 $\frac{3}{4}$ hours, during which time the brig and boat separated nearly 3 miles, the brig SSE. from the boat. Sail was furled before the boat left and was not loosed until after the boat returned.

In the afternoon, when a few miles to the northward and eastward of this position, Mr. Hall found no bottom at 1,000 fathoms, using one 32-pound shot and the triple size line, riding by which he tried the currents. The surface current from five agreeing trials set SE. $\frac{1}{2}$ S. 1 $\frac{1}{16}$ knots per hour, and at 10 fathoms depth it was nearly the same. The parting of the line and loss of the foot square leaded block suspended to it, prevented trying the under current at 80 fathoms. When these observations were made the sea was glassy smooth, with a long swell from NNE. The reckoning and observations to-day show a current of

1 knot per hour westerly, whilst the drift of the bare brig from the sounding boat and the current observations of the boat indicate a considerable current to the southward. The brig has been in the same vicinity to-day and yesterday.

We were three days within from 20 to 30 miles north of the flats of St. Roque, off Cape Toiro, where the NE. and SE. trades seem to meet and form a region of calm and rains, with an oppressive atmosphere resembling that of the equatorial calms. Outside of this region our track shows that the SE. trades, though light, generally prevailed between the Rocas and the main, to within a degree of Point Toiro, and that when we were a degree and a half north of this cape, and in the parallel of the Rocas, the light variable winds, leaving the SE. quadrant, came out to the eastward, soon got northing in them, and turned into gentle NE. trades in 2° S. The direction of the winds around this cape, outside of the influence of the land breeze, and also outside of the belt of calms and rains, appears to be modified by the form of the continent. They come from the southward and eastward, upon the eastern shore, which trends to the northward; whilst around the elbow of the cape they draw more easterly, (interrupted at this season, when the sun is near the equinox and is going north, by small squalls of wind and rain from all around the compass,) and on the northern coast, which trends to the westward they come from NE. The current between the Rocas and the main sets generally from the southward and eastward, from 1 to $1\frac{1}{2}$ knots, until near the flats, where we experienced indications of a counter current or tide. Learned at Pará that their coasting vessels were generally four weeks going from there to Pernambuco. It is more from the failing of the wind there than from the current that it is so difficult to double Cape St. Roque.

CHAPTER VI.

Unsuccessful search for "Blaesdale's reef"—Light on Atalaia point—Visit Para—Yellow fever there—Receive supplies, rate chronometers, &c.—Excellent charts of Brazil and Amazon river by French naval officers—Discolored water from Amazon—Lieutenant Herndon, U. S. Navy, a passenger.

April 1.—When the current observations were made to-day, the wind was moderate, the sea small but irregular. The surface current is the mean of nine trials giving agreeing results. There is a general agreement to-day between the current found from the run and from the boat.

April 2.—The temperature lines came up with but slight inclination. The sea was smooth and breeze light when the current observations were made. The surface cast is the mean of seven, that at 10 is the mean of three, and that at 80 fathoms of four agreeing trials. Several land birds, with dark plumage, flying about the vessel. We are now from 1° to 2° to the northward and westward of our position on the 30th and 31st of March, just north of Cape St. Roque, and are now feeling with the NE. wind the equatorial or trade wind current.

April 3.—Sheet lightning at the northward. The temperature lines came up straight and quick, and the results are reliable, and so are the current observations, which were made under favorable circumstances, and are the mean of three agreeing trials in each case. The boat was absent $2\frac{1}{2}$ hours, and pulled by her log one mile SW. by W. to rejoin the brig, whose sails were furled from the time the boat was lowered until it was hoisted. In the first watch there was a halo round the moon, with a radius of 23° .

April 4.—First Sunday in the month. Called all hands to muster, and read the act for the better government of the navy to the officers and crew. The temperature lines came up well. The current observations are also good; they were made in a calm, with a smooth sea, and the result given, is, as usual, the result of three experiments in each case.

April 5.—The temperature lines came up much inclined. There was a long swell on from the northward. The boat was down $2\frac{1}{2}$ hours, during which time the brig, with sails furled, drifted $1\frac{1}{2}$ miles SE. by S., as found by heaving the boat's log on its return. This agrees with the surface current found by three trials in the boat anchored with 1,000 fathoms line and a 32-pound shot. Four sail in sight at sunset.

April 6.—At noon three sail in sight. At midnight crossed the equator in $38^{\circ} 18' 24''$ W.

April 7.—The temperature lines came up much inclined from the vessel's sides. Mr. Hall made the current observations and felt satisfied they were good. The breeze was 4.

BLAESDALE'S CORAL REEF.

April 8, 9, 10, and 11.—Sounding from the brig at regular and brief intervals, and searching for Blaesdale's reef, of which the following account is given on page 473 of Laurie's North Atlantic Memoir, London, 1845.

"Blaesdale's reef, in about 0° 57' N., and 41° 6' W.—On the 15th of October, 1819, the brig *Richard*, of Ulverston, Captain Blaesdale, struck on a coral reef, in about 0° 56' or 0° 57' N., and longitude, by *account*, beyond 41° W., in fine moderate weather, the ship going at the rate of 3 knots, at 6 p. m. grounded, and remained fast about 10 minutes. The water was smooth, and no breakers seen. Upon sounding, a few minutes after, no bottom could be found at 150 fathoms. The vessel drew 11 feet of water, and in 1 hour there were 18 inches of water in the well.

"On a subsequent survey at Pará three holes were found, each about the size of a man's hat, and nearly through the vessel's bottom, and several large pieces of white coral, as large as a man's hand, were found sticking in different parts."

April 8.—At 9h.20m. a. m. steering west, wind NE., passed through a strong tide rip. At 9h. 15m. a. m. saw a large field of tide rip ahead strongly resembling a shoal. Hove to on the port tack, and lowered a boat to sound. Mr. Renshaw sounded with 400 fathoms of triple size fishing line and a 32-pound armed lead, but got no bottom. The tide rip moved off rapidly to the northward and eastward. With the boat anchored by this lead and line, the current was found to be one knot per hour setting SSW. opposite to the direction in which the tide rip was setting. At 3 p. m. commenced sounding from the brig under easy sail, with a whale boat sounding on each bow a mile off. Passed a Spanish brig. Saw nothing else, except a tide rip to the westward. Mr. Hall relieved Mr. Renshaw, and will, in turn, perform the duty of assistant master for one month.

April 9.—At 7 a. m. hove to, lowered a boat to sound and try surface currents. At 3 p. m. furled sail, and lowered both boats over the position assigned to this danger (Blaesdale's reef.) Mr. Hall, in one boat, got bottom; a good sound, he reports, at 2,980 fathoms, using one 32-pound shot and waxed line.

APRIL 9, 1852.

Latitude 0° 57' 5" N., ☉ m.; longitude 41° 6' 24" W., ☉ p. m.

BOAT SOUNDING.—MR. HALL.

Fathoms.	Time P. M.			Intervals.	Fathoms.	Time P. M.			Intervals.
	<i>h.</i>	<i>m.</i>	<i>s.</i>	<i>m.</i> <i>s.</i>		<i>h.</i>	<i>m.</i>	<i>s.</i>	<i>m.</i> <i>s.</i>
Started...	3	15	0		1,600	3	56	11	3 52
100	3	16	20	1 20	1,700	4	0	0	3 49
200	3	17	55	1 35	1,800	4	3	55	3 55
300	3	19	37	1 42	1,900	4	7	57	4 2
400	3	21	33	1 56	2,000	4	11	55	3 58
500	3	23	44	2 11	2,100	4	15	0	3 5
600	3	26	0	2 16	2,200	4	19	5	4 5
700	3	28	38	2 38	2,300	4	22	45	3 40
800	3	31	21	2 43	2,400	4	28	12	5 27
900	3	34	3	2 42	2,500	4	33	2	4 50
1,000	3	36	18	2 15	2,600	4	37	17	4 15
1,100	3	39	15	2 57	2,700	4	40	15	2 58
1,200	3	42	20	3 5	2,800	4	44	35	4 20
1,300	3	45	25	3 5	2,900	4	49	5	4 30
1,400	3	48	32	3 7	2,980	4	53	30	4 25
1,500	3	52	19	3 47					

Bottom ; time running, 1h. 38m. 30s.

Mr. Renshaw, in the other boat, made current observations. The surface current found is the result of five trials, the current at 10 fathoms of three trials, and at 80 fathoms of two trials.

April 10.—Squally weather; doubled the lookouts, and continued the soundings.

April 11.—Finished the search for Blaesdale's reef, without having seen anything of it. (See track chart.)

April 12.—At 5h. 10m. a. m., furled; took temperature observations from brig; the boat lowered to sound and try currents; got no bottom at 1,000 fathoms. At 3h. 15m. p. m., again furled sail and took temperatures. Sounded from a boat, but got no bottom at 2,000 fathoms with one 32-pound shot and unwaxed line. An unusually rough and combing sea.

APRIL 12, 1852.

Latitude 1° 6' 57" N., ☉ *m.*; *longitude* 43° 43' 40" W., ☉ *p. m.*

BOAT SOUNDING.—MR. RENSRAW.

Fathoms.	Time P. M.			Intervals.	Fathoms.	Time P. M.			Intervals.
	<i>h.</i>	<i>m.</i>	<i>s.</i>	<i>m.</i> <i>s.</i>		<i>h.</i>	<i>m.</i>	<i>s.</i>	<i>m.</i> <i>s.</i>
Started...	3	29	13		1,100	4	1	26	3 59
100	3	30	50	1 37	1,200	4	5	37	4 11
200	3	32	45	1 55	1,300	4	9	50	4 13
300	3	34	58	2 13	1,400	4	14	14	4 24
400	3	37	30	2 32	1,500	4	18	52	4 38
500	3	40	18	2 48	1,600	4	23	33	4 41
600	3	43	10	2 52	1,700	4	28	11	4 38
700	3	46	25	3 15	1,800	4	33	43	5 32
800	3	49	45	3 20	1,900	4	38	31	4 48
900	3	53	31	3 46	2,000	4	43	47	5 16
1,000	3	57	27	3 56					

Line parted ; time running, 1*h.* 14*m.* 34*s.* ; no bottom.

April 13.—At 5*h.* a. m., took current and temperature observations, but found no bottom at 1,000 fathoms. To-day we had a northerly current, instead of the southerly current experienced for several preceding days. At 2 p. m., in latitude 0° 42' N., longitude 45° 17' W., the water appeared discolored ; and at 6*h.* 12*m.* p. m., in latitude 0° 29' N., and longitude 45° 31' W., found bottom of fine gravel and sand at 39½ fathoms. The sea very phosphorescent at night. Sounded during the night.

April 14.—At 8*h.* a. m. crossed the equator in 46° W. At 8*h.* 15*m.* a. m., hove to, lowered a boat, and tried the current. Sounding during the day. In the afternoon, in from 15 to 20 fathoms, passed through several spots of chocolate-colored water, of various shapes and sizes. At 4*h.* 30*m.* p. m., hove to and tried the current from a boat. At 8*h.* 15*m.* p. m., clewed up and anchored in 13 fathoms water, off Caité. Hove the log whilst at anchor. At 8*h.* 30*m.* p. m., the tide sat E. by S., running 1.4 knots per hour. It gradually changed its direction and rate, running more to the southward, and to the southward and westward, until 3*h.* 30*m.* a. m. next morning, when it was running 1½ SW. by S. as we got underway.

April 15.—At daylight, land about Caité in sight to the southward. Spoke a Brazilian schooner from Pará, and learned that there is now a light-house on Atalaia Point. At 2*h.* 10*m.* p. m., discovered the light-house at Atalaia Point, bearing W. by S., and distant 9½ miles. At 4*h.* 45*m.* p. m., fired a bow-gun, with a reduced charge, for a pilot. The concussion broke our improved marine barometer, which has a glass reservoir, and is a more delicate instrument than the common marine barometer. No pilot having come off, anchored at sunset in 11 fathoms water, muddy bottom, in company with an American barque, 22 days from New York, the light-house bearing S. 38° 30' E., and the pilot's flag S. 5° 30' E. Hove the log during the night of the 15th and 16th, with a light easterly breeze prevailing, and found the greatest velocity of ebb to be 2 knots setting E., and that of the flood to be 1½ knots setting W. by S.

The following notice, printed in Portuguese, French, and English, was issued by the secretary of the governor of the province of Pará, dated February 19, 1852:

"Light-house on Atalaia Point, Salinas, latitude S. $0^{\circ} 34'$, longitude E. of the island of Ferro, $330^{\circ} 32'$. Lenticular apparatus of Fresnel and Arago. Light visible 17 miles distance, exhibiting the following changes:

A steady light during.....	70 seconds.
An eclipse during.....	22 "
A bright and short light during.....	12 "
An eclipse during.....	16 "
	<hr/>
	120 "

"These changes occur every two minutes. The light-house will be in operation on and after the 8th of March, 1852."

This position is $1'$ in latitude north of Atalaia Point, as it is laid down in the recent French chart, and is about $4' 20''$ too far west by the same authority.

Lieutenant Raper, R. N., (edition 1849,) gives the eastern extreme of Ferro Island in $17^{\circ} 55'$ W. of Greenwich.....	$17^{\circ} 55'$ W.
The above quoted authority makes the light (on a white tower) on Atalaia Point, west of the east side of Ferro Island.....	$29^{\circ} 28'$ W.

Atalaia Point light west of Greenwich.....	$47^{\circ} 23'$ W.
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But the French chart of 1846, (the best authority in this case,) from the survey by the French naval officers of the Amazon and its approaches, gives the longitude of that part of Atalaia Point on which the light-house stands, reduced to the meridian of Greenwich, $47^{\circ} 18' 20''$ W.

The west extreme of the island of Ferro is, according to Raper, the meridian of Ferro, a primitive sort of prime meridian. It is rather loose to refer the longitude of Atalaia light to the east side of the island of Ferro, especially whilst not giving the exact longitude of the east side, from which the meridional difference of Atalaia is reckoned.

April 16.—At 9 a. m. (having received a pilot) got underway on first quarter of ebb. At noon, passed the Brazilian mail steamer bound from Pará to Rio. At 5h. 25m. p. m., Point Tijoca bearing east, brig had run by patent log $45\frac{1}{2}$ knots, by ground log $51\frac{3}{4}$ knots. This log line was measured, and found to be 6 inches too long in its entire length. At 8h. 15m. a. m., anchored off the village of Colares.

April 17.—At daylight, got underway; the medical officer, thinking that the water here, though apparently sweet, would not keep. At 3h. 50m. p. m., came to anchor off Una, in sight of Pará. Commenced watering on the last of ebb.

Sunday, April 18.—At 8 a. m., received pratique from the health officer. Sent a boat to Henry Lee Norris, esq., our consul, who came off with letters, and accompanied by Lieutenant William Lewis Haddon, United States navy, who had recently arrived here, after an examination of the Amazon, under the instructions of our government.

April 19.—Received from Lieutenant Herndon a marine barometer of similar construction, but apparently ranging a trifle lower than the one broken on the 15th instant. Filled up with fresh water from along side. We watered on the last of ebb. The water was not entirely clear. The existence of yellow fever here made it prudent to hold no communication with the city, except on duty. Lientenants Lee and Herndon, and Consul Norris, waited upon the governor of the province, and presented him with a complete set of Maury's Wind and Current Charts, as explanatory of the kind of duty upon which the Dolphin was engaged. The arrival here of this naval vessel, though for supplies, happening when Lieutenant Herndon, (of the navy,) had just got here from an exploration of the Amazon, whilst his companion, Lieutenant L. Gibbon, U. S. navy, was still in the interior, had excited some suspicion ashore as to the real object of our visit.

April 20.—Obtained salt and fresh provisions and fruit for the crew, and some stores for the vessel, having received every facility from our consul, Mr. Norris. The mean of our chronometers, from the errors and rates found at Fernando de Noronha, gives the longitude of Una one minute and ten seconds of arc ($1' 10''$) too far east of the longitude as taken from the French chart of 1846. Una is a conspicuous point on the river, in near view of which is the main astronomical station, occupied by the French naval officers at Pará, when surveying the Amazon.

Navigators of all nations are under great obligations to the French government for the charts it has published, from the recent suitable surveys made by its naval officers of the coast of another people's county, from French Guayana to near Maranham, including the Amazon; also for the general surveys the French officers made of the coasts of Brazil, fortunately before the yellow fever was known there. These extensive surveys, the French consul here informs us, were made by a moderate addition to the cost and equipment of the naval vessels employed beyond what would have been necessary for them had they been cruising without surveying.

April 21.—At 2h. 30m. a. m. called all hands, hove short, and loosed sail. At 4h. 30m. a. m., the fog having cleared away, got under way for sea. Got a supply of sand from the beach whilst anchored for the tide in San Antonio bay. At 8h. p. m. anchored off Colares.

April 22.—Under way at 1 a. m. At 4 p. m., being just outside of Monjui Bank, discharged the pilot and put the patent log overboard. At 5h. 25m. p. m. crossed the equator in longitude $48^{\circ} 06' 29''$ W. At 9, finding we were fast drifting in shore, anchored in 11 fathoms water, reefed and furled sail, and then tried the current, and found its greatest velocity was 3 knots WSW. Sharp lightning to the eastward.

April 23.—At 1h. a. m. under way. From 5h. 30m. to 6h. 15m. a. m. passed through a heavy tide rip when in from 9 to 10 fathoms water. Tried the currents twice during the day from an anchored boat, and preserved specimens of the bottom. At 6 p. m. the sea water was a deep green color.

April 24.—At 6h. 30m. a. m. and 1 p. m. lowered boats to try currents in 20 fathoms. Sea green all day, and very phosphorescent at night. The transparency of the sea at 1 p. m., when in 19 fathoms

water, sandy bottom, was only $7\frac{1}{2}$ fathoms, owing to the discoloration from the water of the Amazon.

April 25.—Tried current. Sounded frequently, getting bottom in 36 fathoms at midnight. The sea was of a greenish color during the day, and was so at 6h. p. m., when we were in latitude $0^{\circ} 20' N.$, longitude $45^{\circ} 35' W.$; at night it was slightly phosphorescent.

April 26.—At 5h. 20m. a. m. lowered a boat to try currents in 43 fathoms, coral bottom. At 8h. a. m., in latitude $0^{\circ} 58' N.$ longitude $46^{\circ} 7' W.$, the water was of a bluish color. At noon when in latitude $0^{\circ} 55' N.$, longitude $45^{\circ} 56' W.$, the color of the sea was ocean blue, and no bottom at 100 fathoms.

April 27.—At 5h. 10m. a. m. lowered a boat to try currents. Took temperature observations from on board. Exercised great guns; sea blue.

April 28.—The current and temperature observations were indifferent, owing to squalls, &c.

April 29.—The current and temperature observations are good. Examined and re-measured to-day 3,200 fathoms of the line examined and measured at New York. Used the machine, with a wheel of 6 feet circumference, designed by Passed Midshipman Higgins of the navy, given to us from the John Adams by Captain Barron, U. S. navy, when we were at Porto Praya, and which we have found so convenient and useful since. Some of the 100 fathoms lengths were found to be in error from 3 to 5 fathoms.

April 30.—At 7h. 35m. a. m. the master's assistant reported that the chronometers had run down. It appears that the chronometers were not wound up either yesterday, (the 29th,) or the day before, (the 28th.) The master, who was indisposed on the 28th, had requested his assistant, (who was also the officer next in rank to him,) to compare the chronometers at 10 a. m., (the regular hour according to the order posted up over the chronometer box for winding and comparing them daily,) but said nothing to him about winding them. The assistant compared but did not wind them. The next day, (the 29th,) when the master was on the sick list, the assistant again compared the chronometers, (which he was using for his day's work,) but forgot to wind them. The result was, that we were obliged to return to Pará, which occasioned general regret on board. Accidents, it is said, will occur in well regulated families. The inconvenience on this occasion would have been less had we possessed a good weekly chronometer. Wound up the chronometers and gave them a pretty good error from the hack watch, and in the evening another and nearly agreeing error got by a lunar observation. The master returned to duty, and Mr. Mayo became his assistant for the next month. At 11h. 30m. p. m. passed in 6 minutes time through a tide rip extending to the NE. and SW. and setting to the northward and westward. During the whole day water sea-blue.

May 1.—At daylight, when in latitude $37' N.$ and longitude $44^{\circ} 19' W.$, discovered the water to be much discolored; Point Tijoca, (mouth of Amazon,) bearing WSW., distant 225 miles. We had not noticed the water to be discolored yesterday, and were at sunset but 25 miles east of our position at daylight; at 8 a. m., got bottom from a boat in

640 fathoms. Surface water green during the day. At 6h. 30m. p. m. passed a tide rip. At midnight got bottom (white sand and coral) at 40 fathoms.

May 2, (Sunday).—Mustered the crew; read the act for the better government of the navy to the officers and crew. At 4h. 45m. p. m. crossed the equator in $46^{\circ} 20'$ W. The sea water is of a dark olive color to-day. At 3h. 15m. p. m. passed a tide rip extending NNW. and SSE. At 5h. p. m. passed through another tide rip extending E. and W. and moving to the northward. At 8h., 9h., and 10h. p. m. passed through tide rips; in the latter the sea was much agitated. The lead was kept going; no bottom at 15 and 18 fathoms. The sea very phosphorescent during the first watch.

May 3.—Sea not phosphorescent during mid-watch. At daylight discovered the land distant about ten miles SSW. At 11h. a. m. Atalaia point bore W. $\frac{1}{2}$ S. At 3h. 50m. p. m. sailing slowly, with Salinas' light-house bearing due south; took observations of the sun for time, the result of which showed that the chronometers were a few miles to the eastward, using the errors given them on the 30th from the hack watch, and their old rates, and just right using the error found by the lunar observed on the 30th brought forward by the old rates. At 5h. p. m., no pilot having answered our signal, anchored in company with the American brig Garland, of Salem, in 12 fathoms water, and took bearings and angles. From 11 a. m. to 4 p. m. ran 33 miles by the patent log and $35\frac{3}{4}$ miles by the ground log.

May 4.—Hove log, to try the current, from 6 p. m. yesterday to 11 a. m. to-day. The greatest strength of the flood, spring-tide, was three knots, setting W. by S. $\frac{1}{2}$ S. The greatest strength of ebb was $2\frac{1}{2}$ knots, setting E. by N. At 1h. p. m., having received a pilot from Salinas, got underway. At sunset anchored outside of the shoals in 12 fathoms water with 60 fathoms cable.

May 5.—At daylight got underway, with some little difficulty, owing to the swell, to avoid anchoring in which vessels generally prefer to remain a day longer at Salinas, when they do not get a pilot in time to pass these shoals before night. At 10h. 20m. p. m. anchored off Fort Barra in 11 fathoms water, this fort bearing N. 36° E., Caen's church S. $45^{\circ} 15'$ E.

If the Brazilian government would erect a few lights and place some buoys, the entrance to and navigation of the Amazon to Pará would, with the aid of the French chart, be plain and safe without a pilot.

May 6, 7, 8, 9, 10, 11, and 12, employed determining the error and rate of the chronometers from observations of the sun made with sextant and artificial horizon by Mr. Barbot and Mr. Mayo, at Fort Barra, in latitude $1^{\circ} 22' 32''$ S., longitude $48^{\circ} 27'$ W. of Greenwich, by the French chart of 1846, made by the French naval officers. The chronometers, which ran down on the 29th, wound up on and since the 30th, have been running regularly, and the rates now found are near the old rates. Current observations were made during 11 flood and 11 ebb tides. The mean of the greatest velocity of flood was $2\frac{3}{10}$ knots, and of the ebb $2\frac{4}{10}$ knots per hour. Received some stores and provisions, (bullocks,) and anti-scorbutics, principally limes, and a pilot through the agency of our obliging (acting) consul, Henry Bond Dewey, esq.,

and filled up with good water from the river. Ship's stores and refreshments here are scarce, indifferent, and dear.

May 13.—At noon got underway for sea. Lieutenant Wm. Lewis Herndon, U. S. N., (who had not concluded his observations and examinations when we left here on the 21st ultimo,) now took passage on board for the United States. The forthcoming report of this accomplished officer may be consulted with profit and pleasure in regard to that subject, of great and growing interest—the valley of the Amazon.

May 14.—Working down the river, anchoring on the flood.

May 15.—At 11h. a. m. discharged the pilot off Monjui bank.

April.—Our first passage from Salinas to Pará took 1 day 7 hours.

May.—Our second passage from Salinas to Pará took 1 day 11 hours.

Average time of passage, 1 day 9 hours.

April.—Our first passage from Pará to Monjui bank took 1 day 9 hours.

May.—Our second passage from Pará to Monjui bank took 2 days.

Average passage, 1 day 16½ hours.

On each occasion the utmost dispatch was used which the wind, tide, and navigation permitted.

At 1h. 45m. p. m., crossed the equator, (in 48° 08' 00" W. longitude,) for the eighth and last time this cruise.

May 16.—Working off the coast and sounding. Sea discolored.

May 17.—Sea discolored (olive green) and very phosphorescent. Near midnight, in latitude 2° 17' N., longitude 48° 10' W., when nearly becalmed in 40 fathoms, grey sand and black specks, a tide rip passed us moving to the northward and eastward, and extending from NW. to SE.

May 18.—Sea a dark brown color and slightly phosphorescent. A heavy swell from ENE.

May 19.—Sea dark olive color and not phosphorescent. At 5h. 40m. p. m., bottled a specimen of the surface water and of the bottom, coral and shells, got at 58 fathoms depth. (For position see abstract log.) From Point Tijoca to the parallel of Cape North, we found that the general character of the bottom off the mouth of the Amazon is muddy; but from Point Tijoca to the eastward, that the bottom is generally sandy, indicating that the current of the Amazon runs principally to the northward.

May 20.—At 6 a. m., in latitude 3° 25' N., longitude 48° 17' W., water slightly discolored, Cape North (north side of the mouth of the Amazon) bearing SW. distant 130 miles. At noon it was sea blue. At midnight sea slightly phosphorescent.

May 21.—No phosphorescence. Sea deep blue. Saw shoals of flying fish.

May 22.—No phosphorence. Sea dark blue. Saw shoals of porpoises and flying fish.

May 23.—Heavy and irregular sea, generally from northward and eastward.

CHAPTER VII.

Examine the region of discolored water east of the Windward Islands, and the supposed mountainous region extending from 37° on the equator to Cape Charles, United States—
Make unsuccessful search for “Voette’s Bank,” “Galleon’s Bank,” “Galisaioniere’s Rock,” “Martin’s Reef,” “Mourand’s Bank,” and the “Overfalls or Heavy Ripples”—
End of cruise.

May 24.—At 9h. a. m., furled sail, took temperature soundings from brig; got bottom certainly at 1,970 fathoms from boat, with one 32-pound shot, waxed line.

MAY 24, 1852.

Latitude 7° 57' 43" N., ☉ m.; longitude 47° 51' 24" W., ☉ a. m.

BOAT SOUNDING.—MR. HALL.

Fathoms.	Time A. M.			Intervals.	Fathoms.	Time A. M.			Intervals.
	<i>h.</i>	<i>m.</i>	<i>s.</i>	<i>m.</i> <i>s.</i>		<i>h.</i>	<i>m.</i>	<i>s.</i>	<i>m.</i> <i>s.</i>
Started...	8	52	58		1,100	9	17	15	3 5
100	8	53	59	1 1	1,200	9	20	23	3 8
200	8	55	27	1 28	1,300	9	23	43	3 20
300	8	57	4	1 37	1,400	9	27	5	3 22
400	8	58	47	1 43	1,500	9	30	43	3 38
500	9	0	58	2 11	1,600	9	34	21	3 38
600	9	3	22	2 24	1,700	9	38	12	3 51
700	9	5	50	2 28	1,800	9	42	2	3 50
800	9	8	20	2 30	1,900	9	45	47	3 45
900	9	11	13	2 53	1,970	9	49	0	3 13
1,000	9	14	10	2 57					

Bottom; time running, 56m. 2s.

Too rough for current observations. This sound is just within the supposed mountainous region about 300 miles wide, extending from Cape Charles, United States, in a SE. direction, to 37° W. on the equator, and which we entered about 4 a. m. on its south side.

May 25.—Exercised division of great guns.

May 26.—Furled sail twice, took temperatures from brig, and sounded from boat; no bottom at 5h. 30m. a. m., at 500 fathoms, or at 1,855 fathoms at 3h. p. m., when we sounded with one 32-pound shot and waxed line. As this cast is about the centre of the supposed mountainous region, before referred to, it is unfortunate that the line parted, and that the sea is too irregular and rough for more satisfactory sounding.

MAY 26, 1852.

Latitude 11° 11' 42" N., ☾ p. m.; longitude 47° 37' 48" W., ☉ p. m.

BOAT SOUNDING.—MR. DANIELS.

Fathoms.	Time P. M.			Intervals.	Fathoms.	Time P. M.			Intervals.
	<i>h.</i>	<i>m.</i>	<i>s.</i>	<i>m.</i> <i>s.</i>		<i>h.</i>	<i>m.</i>	<i>s.</i>	<i>m.</i> <i>s.</i>
Started . . .	2	53	25		1,000	3	13	15	2 49
100	2	54	27	1 2	1,100	3	16	8	2 53
200	2	55	47	1 20	1,200	3	19	19	3 11
300	2	57	23	1 36	1,300	3	22	25	3 6
400	2	59	8	1 45	1,400	3	25	44	3 19
500	3	1	3	1 55	1,500	3	28	58	3 14
600	3	3	10	2 7	1,600	3	32	13	3 15
700	3	5	24	2 14	1,700	3	35	33	3 20
800	3	7	48	2 24	1,800	3	39	8	3 35
900	3	10	26	2 38	1,855	3	41	20	2 12

Line parted ; time running, 47m. 55s.

May 27.—Sea too rough for any sounding. Saw a large and closely matted bunch of decayed sea-weed, and a quantity of flying fish; and at 8h. p. m., a halo of 22° radius round the moon. Sea blue. No phosphorescence.

VOETTE'S BANK.

May 28.—Blue sea, and no indication of discolored water to-day. Kept a bright look out, and sounded constantly. Made unsuccessful search for Voette's 40 fathoms bank. The only authority for the existence of this bank is a mere memorandum in the Depot de la Marine, that one Joachim Voette (date not given) passed over and sounded on it, in about 15° north latitude, and 228 leagues east of Martinique (say in 49° W. of Greenwich.) [See Laurie's Atlantic Memoir, London, 1845, p. 474.] At 1h. 45m. p. m., being by good observations upon the assigned position of the bank, furled sail, squared yards, and sounded with 250 fathoms fishing line up and down without getting bottom. [See our track chart.] The sea was too rough to lower a boat.

GALLEON'S BANK.

May 29.—Searching with lead and lookouts for Galleon's bank. The only known authority for its existence is given on p. 473 of Laurie's Atlantic Memoir, London, 1845, as follows :

"Galleon's bank, in latitude 15° 56', and longitude 49° 40'. This bank, or reef of rocks, was discovered on the 23d of July, 1730, by Longueville, the pilot of the *San Fernando*, commanded by M. de Navarro, admiral of the Spanish galleons.

"By the detail into which Longueville enters, concerning this danger, (his journal being in the Depot de la Marine at Paris,) there can be no doubt of its existence. It appears that the *San Fernando* struck on and passed over it without receiving any damage. Other ships in the

same fleet also struck, with more or less violence, but without actual injury."

This bank has no existence in the position assigned it. (See our track chart.) The cast of 560 fathoms up and down (no bottom) was made from the brig, (the sea was too rough for sounding from a boat,) with sails furled and yards square, when she was by noon and p. m. observations in the spot where Longueville is said to have struck with the Spanish galleons in 1730. We made three other similar and unsuccessful casts in this vicinity, besides the lines of soundings, and we saw no appearance of discolored water or breakers during the day. The soundings of to-day were on the northern edge of the supposed mountainous region or cold belt, which we have just crossed, having entered it on the south side on the morning of the 24th instant.

May 30.—Sounded twice from the brig with furled sails. The sea was too rough to lower a boat. The last cast (564 fathoms up and down, and no bottom) was in the middle of the belt. The sea was blue, and showed no unusual appearance.

May 31.—At 5h. a. m., Mr. Hall got no bottom at 1,960 fathoms, using one 32-pound shot and unwaxed line.

MAY 31, 1852.

Latitude 13° 28' 25" N., ☉ m.; longitude 52° 26' 40" W., ✱ a. m.

BOAT SOUNDING.—MR. HALL.

Fathoms.	Time A. M.			Intervals.	Fathoms.	Time A. M.			Intervals.
	<i>h.</i>	<i>m.</i>	<i>s.</i>	<i>m.</i> <i>s.</i>		<i>h.</i>	<i>m.</i>	<i>s.</i>	<i>m.</i> <i>s.</i>
Started...	5	45	15		1,100	6	12	40	3 28
100	5	46	25	1 10	1,200	6	16	30	3 50
200	5	48	0	1 35	1,300	6	20	26	3 56
300	5	49	54	1 54	1,400	6	24	28	4 2
400	5	52	5	2 11	1,500	6	28	44	4 16
500	5	54	21	2 16	1,600	6	33	14	4 30
600	5	56	55	2 34	1,700	6	37	37	4 23
700	5	59	44	2 49	1,800	6	42	5	4 28
800	6	2	36	2 52	1,900	6	47	12	5 7
900	6	5	50	3 14	1,960	6	50	5	2 53
1,000	6	9	12	3 22					

Line parted ; time running, 1h. 4m. 50s.

At 3h. p. m., Mr. Renshaw obtained bottom from a boat with one 32-pound shot and waxed line, at 2,780 fathoms on the southern edge of the belt, across which we have run a second line of soundings.



MAY 31, 1852.

Latitude 12° 47' 30" N., ☉ m.; longitude 52° 57' 52" W., ☉ p. m.

BOAT SOUNDING.—MR. RENSHAW.

Fathoms.	Time P. M.			Intervals.	Fathoms.	Time P. M.			Intervals.
	<i>h.</i>	<i>m.</i>	<i>s.</i>	<i>m.</i> <i>s.</i>		<i>h.</i>	<i>m.</i>	<i>s.</i>	<i>m.</i> <i>s.</i>
Started...	3	22	50		1,500	4	1	55	3 40
100	3	23	50	1 0	1,600	4	5	45	3 50
200	3	25	15	1 25	1,700	4	10	30	4 45
300	3	26	50	1 35	1,800	4	14	30	4 0
400	3	28	45	1 55	1,900	4	17	30	3 0
500	3	30	55	2 10	2,000	4	21	29	3 59
600	3	33	15	2 20	2,100	4	25	30	4 1
700	3	35	45	2 30	2,200	4	29	30	4 0
800	3	38	40	2 55	2,300	4	33	45	4 15
900	3	41	40	3 0	2,400	4	37	55	4 10
1,000	3	44	45	3 5	2,500	4	42	15	4 20
1,100	3	48	0	3 15	2,600	4	46	30	4 15
1,200	3	51	15	3 15	2,700	4	50	50	4 20
1,300	3	54	40	3 25	2,790	4	55	45	4 55
1,400	3	58	15	3 35					

Bottom at 2,780; time running, 1*h.* 32*m.* 55*s.*

Nothing unusual in the appearance of the sea. Bent a new foresail, and exercised a division of guns. Edward Howard, captain fore-castle, died of disease of the heart.

June 1.—Called all hands to bury the dead; read the burial service over the body of Howard, and committed it to the deep. Stationed an extra lookout, and kept a bright lookout during the day, with and without spy-glasses, in search of discolored water. At 3*h.* 30*m.* p. m., being in the position where Lieutenant Greevelink, in the Dutch government packet *Echo*, [Laurie's *Atlantic Memoir*, London, 1845, p. 475,] was three quarters of an hour, with a breeze, passing on a cloudless day in September, 1835, through spots of water so thick with mud as to make the blue water curl against their edges; furled sails, took temperature observations, and looked all around in vain for discolored water. Sounded from a boat, without getting bottom at 1,000 fathoms. Lieutenant Greevelink did not suppose at the time that these spots indicated soundings, but imagined them to be of the waters of the *Marañon*, precipitated in its rapid descent under the surface of the sea, and brought up by lesser specific gravity at a point from 600 to 700 miles off in the sea. At sunset, as throughout the day, we saw no appearance of discolored water. The swell, which was large, injured both the temperature and current observations.

June 2.—Yesterday at sunset (and during the day) the color of the ocean was sea blue. This morning at sunrise (when in latitude 12° 21' N., longitude 54° 06' W.) the water appeared much discolored, and of about the same color that we passed through in approaching the Amazon, viz: of a dingy green color. We were about 400 miles to the eastward of the mouths of the Orinoco, and 800 miles to the northward of the mouths of the Amazon. At sunset we were in 12° 22' N., and 54° 57' W., and still in the discolored water, through which

we had run 51 miles, and of which we bottled specimens. During the night passed a few miles east of the muddy water, to be found, according to the Complete Pilot for the Leeward Islands, 1782, at 70 or 80 leagues east of Barbadoes. At sunrise we found no bottom at 1,000 fathoms.

GALISSIONIERE'S ROCK.

At 2h. 45m. p. m., Mr. Hall sounded from a boat and got bottom, with one 32-pound shot, waxed line, at 2,570 fathoms on the spot assigned to Galissioniere's rock, of which the following account is given on p. 476 of Laurie's North Atlantic Memoir, London, 1845:

"Galissioniere's rock, about 12° 20' N., and 54° 49' W. This vigia was exhibited on the chart of M. Rochette as a rock mentioned by M. Galissioniere, and some other navigators. A spot nearly in the same situation had been previously called the Isle of Fonseca. It is said to have been seen by the *Rainbow*, a man-of-war. We have been lately informed, though vaguely, that the rock was again seen in 1822."

We saw no other evidence of danger than the discolored water, which the sounding showed to be deep.

JUNE 2, 1852.

Latitude 12° 20' 17" N., ☉ m.; *longitude* 54° 48' 55" W., ☉ p. m.

BOAT SOUNDING.—MR. HALL.

Fathoms.	Time P. M.			Intervals.	Fathoms.	Time P. M.			Intervals.
	<i>h.</i>	<i>m.</i>	<i>s.</i>	<i>m.</i> <i>s.</i>		<i>h.</i>	<i>m.</i>	<i>s.</i>	<i>m.</i> <i>s.</i>
Started...	2	56	7		1,400	3	29	40	3 20
100	2	57	20	1 13	1,500	3	32	55	3 15
200	2	58	40	1 20	1,600	3	36	22	3 27
300	3	0	24	1 44	1,700	3	39	58	3 36
400	3	2	16	1 52	1,800	3	43	44	3 46
500	3	4	21	2 5	1,900	3	47	38	3 54
600	3	6	39	2 18	2,000	3	51	36	3 58
700	3	9	9	2 30	2,100	3	55	15	3 39
800	3	11	44	2 35	2,200	3	59	5	3 50
900	3	14	33	2 49	2,300	4	3	7	4 2
1,000	3	17	22	2 49	2,400	4	7	14	4 7
1,100	3	20	14	2 52	2,500	4	11	24	4 10
1,200	3	23	11	2 57	2,570	4	14	32	3 8
1,300	3	26	20	3 9					

Bottom, in 1h. 18m. 25s.

Saw many flocks of flying fish during the day. Water not phosphorescent at night.

June 3.—At sunrise, when in latitude 13° 24' N., and longitude 54° 57' W., the water was blue, and so continued till noon, in 14° 10' N., and 54° 46' W. We here ran 46' N. and 11' E. through blue water. From noon to sunset, the water was of a greenish appearance. At sunset we were in 14° 46' N., and 54° 39' W., and had run since noon 36' N. and 5' E. through green colored water, but not near as remark-

able as that of yesterday. Bottled specimens, and took temperature observations. Saw many flying fish during the day, mostly small ones.

June 4.—Sea ocean blue to-day. Saw many large and small flying fish and much sea-weed, generally fresh looking, in detached bunches, leaf narrow, berries full and fresh. At 10h. a. m., just within the south side of the belt, and “in the parallel of the island of Dominica, and very near the 55th degree of longitude, a space wherein the water seems constantly milky, though the sea is very deep,” and where Humboldt suggests there may be a sunken volcanic islet. Mr. Mayo, at 10 a. m., got bottom at 3,020 fathoms with one 32-pound shot, waxed line.

JUNE 4, 1852.

Latitude 15° 25' 7" N., ☉ m.; longitude 55° 1' 20" W., ☉ a. m.

BOAT SOUNDING.—MR. HALL.

Fathoms.	Time A. M.			Intervals.	Fathoms.	Time A. M.			Intervals.
	<i>h.</i>	<i>m.</i>	<i>s.</i>	<i>m.</i> <i>s.</i>		<i>h.</i>	<i>m.</i>	<i>s.</i>	<i>m.</i> <i>s.</i>
Started...	10	24	15		1,600	11	7	54	3 49
100	10	25	20	1 5	1,700	11	12	0	4 6
200	10	26	48	1 28	1,800	11	16	19	4 19
300	10	28	30	1 42	1,900	11	20	25	4 6
400	10	30	37	2 7	2,000	11	24	40	4 15
500	10	32	40	2 3	2,100	11	28	55	4 15
600	10	34	59	2 19	2,200	11	33	20	4 25
700	10	37	36	2 37	2,300	11	37	35	4 15
800	10	40	15	2 39	2,400	11	42	34	4 59
900	10	43	7	2 52	2,500	11	47	15	4 41
1,000	10	46	16	3 9	2,600	11	52	3	4 48
1,100	10	49	36	3 20	2,700	11	56	55	4 52
1,200	10	53	0	3 24	2,800	12	1	55	5 0
1,300	10	56	33	3 33	2,900	12	6	48	4 53
1,400	11	0	21	3 48	3,000	12	12	16	5 28
1,500	11	4	5	3 44	3,020	12	13	20	1 4

Bottom ; time running, 1h. 49m. 5s.

Sea rough and irregular. The temperature lines came in much inclined. About sunset left the region of discolored water, (which we entered on the morning of the 1st instant, lying between 11½° and 15½° N., and 53½° and 55½° W., according to our observations and the old authorities just referred to,) and steered for Martin’s Reef.

June 5.—At daylight furled sail and took temperatures. Sounded from a boat; too rough for currents. Saw much fresh looking sea-weed and many flying fish, mostly small.

MARTIN’S REEF.

June 6 and 7.—Stationed extra lookouts and sounded during the day searching for Martin’s Reef. What authority there is for its existence is given on page 476 of Laurie’s Atlantic Memoir, London, 1845, as follows:

“Martin’s Reef, eastward of Gaudaloupe, in 16° 42’ N. and 58° 53’

W. A shoal was inserted hereabout on the chart of Bellin, 1742, who says that it is mentioned by many navigators.

"It was again seen in July, 1816, by Captain Martin, of the ship *John Manning*. The shoal seemed to consist of yellow sand with seaweed upon it; to be about half a mile in length from east to west, and a quarter of a mile in breadth from north to south.

"We have been informed on respectable authority that this reef was again seen by the ship *Cecilia*, of Glasgow, 19th of July, 1823, by which the position assigned was $16^{\circ} 44'$ N. and $58^{\circ} 50'$ W.

"To the commander of the ship it appeared to be about $1\frac{1}{2}$ or 2 miles long, and only about 30 feet wide; the western part, shaped like the bulb of a thermometer, seemed dangerous.

"Lastly, Captain Newbold, of the brig *Transit*, on her passage from Halifax to St. Vincent, in February, 1842, discovered a shoal to windward of the island of Antigua, in latitude $16^{\circ} 42'$ N., longitude $59^{\circ} 6'$.

"He examined it as carefully as circumstances would permit, and describes it to be about 200 feet long and 80 wide, with 3 fathoms water in the centre, and much shallower on the edges.

"The mean of these three positions is given above."

The latitude and longitude in which the *John Manning* is here reported to have found the reef is not given, but the mean of the three positions named is given. We sounded along its parallel from $68^{\circ} 35'$ to $69^{\circ} 15'$, (see track chart,) with a clear radius of vision, and examining the neighborhood of the mean position assumed by Laurie, within two miles of which Mr. Renshaw, sounding from a boat, found no bottom at 3,200 fathoms depth, using waxed line and one 32-pound shot.

JUNE 6, 1852.

Latitude $16^{\circ} 43' 22''$, \odot m.; longitude $58^{\circ} 54' 34''$, \odot p. m.

BOAT SOUNDING.—MR. RENSHAW.

Fathoms.	Time P. M.			Intervals.	Fathoms.	Time P. M.			Intervals.
	<i>h.</i>	<i>m.</i>	<i>s.</i>	<i>m.</i> <i>s.</i>		<i>h.</i>	<i>m.</i>	<i>s.</i>	<i>m.</i> <i>s.</i>
Started...	4	41	36		1,700	5	25	8	3 33
100	4	42	41	1 5	1,800	5	28	46	3 38
200	4	44	15	1 34	1,900	5	32	31	3 45
300	4	45	56	1 41	2,000	5	36	20	3 49
400	4	47	51	1 55	2,100	5	40	12	3 52
500	4	49	55	2 4	2,200	5	44	12	4 0
600	4	52	10	2 15	2,300	5	48	19	4 7
700	4	54	35	2 25	2,400	5	52	30	4 11
800	4	57	8	2 33	2,500	5	56	45	4 15
900	4	59	46	2 38	2,600	6	1	10	4 25
1,000	5	2	33	2 47	2,700	6	5	36	4 26
1,100	5	5	25	2 52	2,800	6	10	5	4 29
1,200	5	8	25	3 0	2,900	6	14	34	4 39
1,300	5	11	30	3 5	3,000	6	19	8	4 34
1,400	5	14	50	3 20	3,100	6	24	20	5 12
1,500	5	18	9	3 19	3,200	6	29	32	5 12
1,600	5	21	35	3 26					

Line parted, 1h. 47m. 56s.

In the position where the Transit located this reef in 1842, we did not find bottom at 1,000 fathoms.

Throughout the day we were unable to discover any appearance of a rock, or reef, or discolored water. Blue water, flying fish, (mostly large,) a few sea birds, and fresh sea-weed were seen. We are not informed that the Transit made reliable observations, or had any chronometers. It is possible enough she may have got astray among the Windward Islands. But there is no record given of any observations he may have made, or of her run, as should have been the case where such a discovery is claimed, whereby she might have been tracked closely for the purpose of confirming or disproving the report.

June 8.—Saw much narrow leaf sea-weed, generally fresh and very full of animals, such as crabs, shrimps, and toad fish. Saw many medusæ, (Portuguese men-of-war,) and some flying fish. Sea blue by day and not phosphorescent at night. Mr. Hall got bottom, (with one 32-pound shot and unwaxed line,) at 3,300 fathoms, on the southern edge of the belt.

JUNE 8, 1852.

Latitude 19° 2' 36" N., ☉ m.; longitude 59° 33' 20" W., ☉ p. m.

BOAT SOUNDING.—MR. HALL.

Fathoms	Time P. M.			Intervals.	Fathoms.	Time P. M.			Intervals.
	<i>h.</i>	<i>m.</i>	<i>s.</i>	<i>m.</i> <i>s.</i>		<i>h.</i>	<i>m.</i>	<i>s.</i>	<i>m.</i> <i>s.</i>
Started . . .	4	10	59		1,700	4	57	5	3 49
100	4	12	11	1 12	1,800	5	0	55	3 50
200	4	13	45	1 34	1,900	5	4	49	3 54
300	4	15	33	1 48	2,000	5	8	45	3 56
400	4	17	33	2 0	2,100	5	12	45	4 0
500	4	19	45	2 12	2,200	5	16	51	4 6
600	4	22	5	2 20	2,300	5	21	14	4 23
700	4	24	33	2 28	2,400	5	25	30	4 16
800	4	27	15	2 42	2,500	5	29	55	4 25
900	4	30	7	2 52	2,600	5	34	22	4 27
1,000	4	33	2	2 55	2,700	5	39	2	4 40
1,100	4	36	10	3 8	2,800	5	43	38	4 36
1,200	4	39	25	3 15	2,900	5	48	10	4 32
1,300	4	42	45	3 20	3,000	5	52	45	4 35
1,400	4	46	5	3 20	3,100	5	57	37	4 52
1,500	4	49	40	3 35	3,200	6	2	40	5 3
1,600	4	53	16	3 36	3,300	6	8	55	6 15

Bottom; time running, 1h. 57m. 56s.

June 9.—Sounded at 7 a. m. in the belt from a boat, no bottom at 1,000 fathoms, and again at 4 p. m. without getting bottom at 1,200 fathoms, when the line was checked, owing to a rising squall, and parted. Used one 32-pound shot and unwaxed line each time.

JUNE 9, 1852.

Latitude 20° 12' 30'' N., ☐ m.; longitude 59° 38' 52'' W., ☉ a. m.

BOAT SOUNDING.—MR. HALL.

Fathoms.	Time A. M.			Intervals.	Fathoms.	Time A. M.			Intervals.
	<i>h.</i>	<i>m.</i>	<i>s.</i>	<i>m.</i> <i>s.</i>		<i>h.</i>	<i>m.</i>	<i>s.</i>	<i>m.</i> <i>s.</i>
Started...	7	20	40		600	7	33	0	2 48
100	7	21	55	1 15	700	7	36	0	3 0
200	7	23	30	1 35	800	7	39	17	3 17
300	7	25	26	1 56	900	7	42	42	3 25
400	7	27	40	2 14	1,000	7	46	10	3 28
500	7	30	12	2 32					

Line parted ; time running, 25m. 30s. ; no bottom.

JUNE 9, 1852.

Latitude 21° 13' 44'' N., ☉ n.; longitude 59° 36' 10'' W., ☉ p. m.

BOAT SOUNDING.—MR. RENSHAW.

Fathoms.	Time P. M.			Intervals.	Fathoms.	Time P. M.			Intervals.
	<i>h.</i>	<i>m.</i>	<i>s.</i>	<i>m.</i> <i>s.</i>		<i>h.</i>	<i>m.</i>	<i>s.</i>	<i>m.</i> <i>s.</i>
Started...	4	11	55		700	4	26	46	2 56
100	4	13	1	1 6	800	4	29	54	3 8
200	4	14	38	1 37	900	4	33	3	3 9
300	4	16	30	1 52	1,000	4	36	40	3 37
400	4	18	40	2 10	1,100	4	40	21	3 41
500	4	21	10	2 30	1,200	4	45	15	4 54
600	4	23	50	2 40					

Line parted ; time running, 33m. 20s. ; no bottom.

Took temperatures with furled sails at each sounding station. Saw much sea-weed, the fresh looking floated low, the stalest was on the surface; some of the weed was in detached patches, some in streaks from 1 to 4 feet wide, setting in the direction of the wind.

June 10.—About the middle of the belt, at 7h. 15m. a. m., furled sail and lowered a boat to sound; no bottom at 250 fathoms; when finding the sea too rough for the boat, it was hoisted up, and sounded with small line and one 32-pound shot from the vessel. By checking the line occasionally until it swung in towards the vessel, and making due allowance for stray line, estimated an up and down sound of 800 fathoms, without getting bottom. At 5h. 25m. p. m. again furled and cast in like manner, finding no bottom at 600 fathoms.

June 11.—Approaching the northern edge of the belt. The several soundings made to-day were from the weather gangway of the brig, with all sail furled, using small line and one 32-pound shot. Some chain lightning and much very vivid sheet lightning in all quarters of the heavens. Much sea-weed, generally stale, floating in lines with the wind.

June 12.—On the northern edge of the belt, having run a third line of soundings over it. Mr. Hall got bottom this morning from the boat at 3,825 fathoms, with one 32-pound shot, and reports that the line, which was kept running up and down by occasional gentle pulling, was of our smallest size and best quality of unbleached flax-thread fishing-line, of three strands, and four threads to each strand, well waxed throughout, ran unusually well and quicker than usual. The wind was light; sea tolerably smooth.

JUNE 12, 1852.

Latitude 26° 32' 31" N., D. R.; longitude 60° 6' 51" W., D a. m.

BOAT SOUNDING.—MR. HALL.

Fathoms.	Time A. M.			Intervals.	Fathoms.	Time A. M.			Intervals.
	<i>h.</i>	<i>m.</i>	<i>s.</i>	<i>m.</i> <i>s.</i>		<i>h.</i>	<i>m.</i>	<i>s.</i>	<i>m.</i> <i>s.</i>
Started...	5	41	19		2,000	6	24	54	2 44
100	5	42	11	0 52	2,100	6	27	40	2 46
200	0	0	0	0 0	2,200	6	30	31	2 51
300	5	44	55	2 44	2,300	6	33	24	2 53
400	5	46	36	1 41	2,400	6	36	23	2 59
500	5	48	25	1 49	2,500	6	39	30	3 7
600	5	50	16	1 51	2,600	7	42	37	3 7
700	5	52	14	1 58	2,700	6	45	45	3 8
800	5	54	16	2 2	2,800	6	48	53	3 8
900	5	56	26	2 10	2,900	6	52	2	3 9
1,000	5	58	40	2 14	3,000	6	55	12	3 10
1,100	6	1	6	2 26	3,100	6	58	22	3 10
1,120	6	3	38	2 32	3,200	7	1	32	3 10
1,300	6	6	10	2 32	3,300	7	4	44	3 12
1,400	6	8	44	2 34	3,400	7	7	57	3 13
1,500	6	11	26	2 42	3,500	7	11	17	3 20
1,600	6	14	2	2 36	3,600	7	14	40	3 23
1,700	6	16	45	2 43	3,700	7	18	8	3 28
1,800	6	19	26	2 41	3,800	7	21	42	3 34
1,900	6	22	10	2 44	3,825	7	22	37	0 55

Bottom; time running, 1h. 41m. 18s.

This cast, reported "a good one," was the deepest made during the cruise. Saw much sea-weed during the day, generally old, and some fresh pieces. On the English admiralty chart of June 23, 1851, soundings in 366 fathoms are laid down a degree north of our sounding of to-day, reported in the New Bedford Mercury to have been found by the *Harvest* in 1850. In the extract from the narrative of the *Harvest*, given in the London Nautical Magazine for November, 1850, page 700, it is said:

"April 15; latitude 27° 30' N., longitude 60° 3' W., Bermuda bearing NW. by N., 300 miles, sounded and got bottom in 366 fathoms."

The line (used) was constructed thus: first 100 fathoms (of) five parts of shoe thread, second four parts, third three parts, fourth two parts, remainder single. The lead weighed five pounds; the whole wound upon a light reel and held by hand. In this process of obtaining soundings the lead is not to be hauled up."

The experiments made by the *Dolphin* and others of our public ves-

sels show how rapidly such twine as was used by the Harvest would untwist, open, and draw apart. Instead of getting bottom at 366 fathoms, the probability is that the fourth 100 fathoms' length of line used by the Harvest, and made of but two threads of shoe thread, or probably enough some of the weak line below it had parted, when it stopped running, and that there was then no strain upon the line, which they would have found out had an attempt been made to haul it up.

The Harvest reports obtaining bottom in like manner on two other occasions in this vicinity—once at 160 miles S. by E. of Bermuda, with bottom at 620 fathoms, which is at about twice the depth, half the distance, and in the same direction of the other above mentioned supposed sounding. It is impossible to repose any confidence in the Harvest's soundings as thus reported, for besides the very insufficient line, or rather twine used, it is not shown whether or not the sound was taken from the vessel hove to, or with sails furled, or from a boat allowed to drift to leeward, or kept over the descending lead by management of the oars.

June 13.—At 10h. 15m. a. m. saw a long well defined water spout proceeding from a nimbus cloud bearing SW. by W., distant 10 miles; it disappeared, soon formed again, and was then in view $4\frac{1}{2}$ minutes; its funnel was $2^{\circ} 27'$, and its spout $1^{\circ} 42'$ of altitude. Saw sea-weed in moderate quantities in narrow streaks in the direction of the wind.

June 14.—In the middle of the belt, searching for the Overfalls or Heavy ripples, of which the following account is given in Laurie's Atlantic Memoir, London, 1845, p. 468:

"Overfalls or heavy ripples, in latitude $24^{\circ} 11'$ and longitude $61^{\circ} 44'$. On Sunday, the 7th of February, 1819, at 10 a. m., the schooner *Brilliant*, Captain Tulloch, on her passage from Gibraltar to Havana, passed through very heavy overfalls extending NNE. $\frac{1}{2}$ E. and SSW. $\frac{1}{2}$ W., *true*, as far as the eye could reach, with much sea-weed (*fucus natans*) in it. The breadth of the overfalls did not exceed half a mile. Course run from 10 a. m. W. by N., six miles an hour, equal to twelve miles. Latitude observed at noon $24^{\circ} 10' 38''$. Hence the latitude in which we crossed the overfalls was about $24^{\circ} 11' 11''$, after allowing $1^{\circ} 45'$ S. for heave of the sea. The longitude of the overfalls I found, by mean of three sets of lunars, stars Regulus and Aldebaran, east and west of the moon, continued to noon, by account, was $61^{\circ} 43' 57''$ W. The preceding information was communicated by our friend Captain Livingston, by whom the lunar distances were taken: He adds, 'none of us saw such a heavy ripple, except near land, before; and both Captain Tulloch and I felt confident, that if there had been a fresh breeze, the overfalls would have broke very heavily. We saw no danger, but both suspect that some exists hereabout; and there was a good deal of Gulf weed about the edges of the ripples.'"

It will be remarked that this longitude was from lunar observation, but when taken the account does not state. The allowance of $1^{\circ} 45'$ S. is large, even when corrected to $1' 45''$ S. for difference of latitude caused by heave of the sea in two hours run, "at six miles an hour," in a moderate breeze; for such it must have been, as the writer says "if there had been a *fresh breeze*, the overfalls would have broke *very heavily*." They ought to have broke heavily if there was anything to

break against, with a heaving sea or swell sufficient to set the vessel south near a mile an hour, when sailing W. by N. six miles an hour, probably in the NE. trades. These overfalls were a half mile wide, and, it is to be inferred from the account, some 15 or 20 miles long; yet, in all that extent, the writer says "we saw no danger," and it appears at the time made no effort to ascertain if there was any.

The weather was very clear, and the water smooth and blue during the day. We kept the lead going, and an extra lookout aloft with a spyglass. At 3h. 23m. p. m. when from the noon latitude and from the longitude by chronometers from the a. m. sun sights, (confirmed within a half minute of longitude in arc by the p. m. chronometer sights,) we were at the assigned position of these overfalls, with all sail furled, took temperatures from the brig, and sounded from a boat with a 32-pound shot and waxed fishing line, when Mr. Hall got bottom at 3,450 fathoms.

JUNE 14, 1852.

Latitude $24^{\circ} 11' 8''$ N., \odot m.; longitude $61^{\circ} 43' 31''$ W., \odot p. m.

BOAT SOUNDING.—MR. HALL.

Fathoms.	Time P. M.			Intervals.	Fathoms.	Time P. M.			Intervals.		
	h.	m.	s.	m.	s.		h.	m.	s.	m.	s.
Started...	3	34	20			1,800	4	15	0	3	26
100	3	35	11	0	51	1,900	4	18	30	3	30
200	3	36	15	1	4	2,000	4	22	5	3	35
300	3	37	34	1	19	2,100	4	25	43	3	38
400	3	39	2	1	28	2,200	4	29	22	3	39
500	3	40	42	1	40	2,300	4	33	8	3	46
600	3	42	30	1	48	2,400	4	37	0	3	52
700	3	44	23	1	53	2,500	4	41	2	4	2
800	3	46	25	2	2	2,600	4	45	10	4	8
900	3	48	45	2	20	2,700	4	49	22	4	12
1,000	3	51	13	2	28	2,800	4	53	38	4	16
1,100	3	53	45	2	32	2,900	4	58	2	4	24
1,200	3	56	35	2	50	3,000	5	2	33	4	31
1,300	3	59	25	2	50	3,100	5	7	4	4	31
1,400	4	2	23	2	58	3,200	5	11	40	4	36
1,500	4	5	24	3	1	3,300	5	16	17	4	37
1,600	4	8	26	3	2	3,400	5	20	56	4	39
1,700	4	11	34	3	8	3,500	5	26	0	5	4

Time running, 1h. 51m. 40s.; bottom at 3,450, in 1h. 49m. 8s.

This good sound was near the middle of the supposed mountainous belt. The sounding taken at 7h. 10m. p. m. showed no bottom at 350 fathoms of small line up and down. This position is given in latitude and longitude by p. m. twilight stars. Saw a small quantity of stale sea-weed during the day, but no indication of any danger.

June 15.—The morning cast was made from the vessel, using fishing line and shot. The afternoon cast was made with triple size line from a boat. No bottom at either. Saw a few gulls and some sea-weed, mostly stale. The transparency of the water observed from the vessel this morning, when the sky was overcast and it was raining, was only

9 fathoms. The weather was much better when the transparency was tried in the afternoon.

MOURAND'S BANK.

June 16, 17, 18, 19, and 20.—Sounding and searching with lead and glass for Mourand's bank, of which the following account is given in Laurie's Atlantic Memoir; London, 1845, p. 468:

MOURAND'S BANK, IN LATITUDE $24^{\circ} 34'$, LONGITUDE $65^{\circ} 10'$.

“This danger was discovered by Mourand, commander of the *Prince de Nizorre*, of Nantes, on the 6th of April, 1773. This person has the character of having been an intelligent navigator and accurate observer. He describes it to be a ‘bank of red sand, many parts of which are out of water, like detached islands, over which the sea breaks; it appeared to extend about a quarter of a league from north to south.’ The journal of Captain Mourand's voyage having been submitted to the consideration of Messrs. Verdun, Borda, and Pingré, they have been enabled to calculate with every probability of correctness its true position.”

This location is on the southern edge of the belt of supposed subterranean mountains.

June 16.—Saw much sea-weed in NNE. and SSW. lines, with some large patches; bottled a specimen.

June 17.—Patent log made a false exhibit from 2 to 3 p. m.; logged that hour by common log. At 5h. 30m. p. m., Mr. Hall found no bottom with one 32-pound shot and small line at 1,000 fathoms. Much lightning in all quarters during first watch.

June 18.—Much sheet lightning during mid and forenoon watches; some forked lightning in latter. Passed a ship and a schooner. Saw a little sea-weed.

June 19.—Two sail in sight. Saw a little sea-weed.

June 20.—In morning watch saw large patches of stale looking sea-weed floating in lines parallel to the wind. In the forenoon watch saw much sea-weed, generally fresh looking. At 9h. a. m. sounded from a boat, when Mr. Hall got bottom at 3,560 fathoms with the waxed fishing line and one 32-pound shot, (sea smooth and wind light,) near the position of the reef, but not upon it, as was supposed at the time, from good twilight observations of this morning.

JUNE 20, 1852.

Latitude 24° 36' 46" N., * a. m.; longitude 65° 12' 18" W., * a. m.

BOAT SOUNDING.—MR. HALL.

Fathoms.	Time A. M.			Intervals.	Fathoms.	Time A. M.			Intervals.
	<i>h.</i>	<i>m.</i>	<i>s.</i>	<i>m.</i> <i>s.</i>		<i>h.</i>	<i>m.</i>	<i>s.</i>	<i>m.</i> <i>s.</i>
Started...	9	3	36		1,900	9	49	0	3 13
100	9	4	37	1 1	2,000	9	52	19	3 19
200	9	5	56	1 19	2,100	9	55	39	3 20
300	9	7	27	1 31	2,200	9	59	5	3 26
400	9	9	10	1 43	2,300	10	2	30	3 25
500	9	11	0	1 50	2,400	10	5	55	3 25
600	9	13	1	2 1	2,500	10	9	30	3 35
700	9	15	14	2 13	2,600	10	13	5	3 35
800	9	17	34	2 20	2,700	10	16	45	3 40
900	9	19	55	2 21	2,800	10	20	25	3 40
1,000	9	22	30	2 35	2,900	10	24	5	3 40
1,100	9	25	5	2 35	3,000	10	27	45	3 40
1,200	9	27	50	2 45	3,100	10	31	40	3 55
1,300	9	30	40	2 50	3,200	10	35	35	3 55
1,400	9	33	33	2 53	3,300	10	39	35	4 0
1,500	9	36	32	2 59	3,400	10	43	36	4 1
1,600	9	39	34	3 2	3,500	10	47	56	4 20
1,700	9	42	39	3 5	3,560	10	51	27	3 31
1,800	9	45	47	3 8	3,600	10	53	30	2 3

Time running, 1h. 49m. 54s.: bottom at 3,560, in 1h. 47m. 51s.

This sound was taken near the southern edge of the belt, over which we have now run four lines of soundings, and shall cross it again in the homeward route. At 7h. p. m. sounded with 1,000 fathoms of line in the position of the vigia, by the mean of all the good observations of the day, without getting bottom. Tried the surface current. Saw no indication of any shoal, either above or below the surface, during our search for this alleged discovery in 1773. Lost the northeast trades in 3° north on the African side January 12, and took them, light and variable, in 3° south on the American side, north of Cape St. Roque, and at 2° south (April 4) they became steady, though still light. Did not lose them again until we got in the parallel of 25° north, to the southward of Bermuda, near the middle of June, in about the same latitude in which we took them at the close of November, on the eastern side of the Atlantic.

The trades have been somewhat stronger, with rougher seas (less favorable for sounding) and with more rain on the western than on the eastern side of the Atlantic—shedding the moisture taken up on their passage across the Atlantic before reaching the land.

June 21.—Saw small quantities of sea-weed, in detached bunches, floating high. At 40m. p. m. furled sail, took temperatures from brig, and sounded from boat with one 32-pound shot, without getting bottom with 2,350 fathoms of unwaxed line, which was all there was on the reel. This cast was made just south of the belt. The line parted before the current could be tried from the boat.

JUNE 21, 1852.

Latitude 25° 14' 13" N., ☉ m.; longitude 66° 57' 12" W., ☉ a. m.

BOAT SOUNDING.—MR. RENSHAW.

Fathoms.	Time P. M.			Intervals.	Fathoms.	Time P. M.			Intervals.
	<i>h.</i>	<i>m.</i>	<i>s.</i>	<i>m.</i> <i>s.</i>		<i>h.</i>	<i>m.</i>	<i>s.</i>	<i>m.</i> <i>s.</i>
Started...	12	51	17		1,300	1	25	40	3 40
100	12	52	15	0 58	1,400	1	29	35	3 55
200	12	53	30	1 15	1,500	1	33	48	4 13
300	12	55	14	1 44	1,600	1	38	6	4 18
400	12	57	15	2 1	1,700	1	42	45	4 39
500	12	59	30	2 15	1,800	1	47	20	4 35
600	1	2	9	2 39	1,900	1	52	9	4 49
700	1	4	55	2 46	2,000	1	57	3	4 54
800	1	7	55	3 0	2,100	2	2	22	5 19
900	1	11	3	3 8	2,200	2	7	23	5 1
1,000	1	14	30	3 27	2,300	2	12	34	5 11
1,100	1	18	10	3 40	2,350	2	15	12	2 38
1,200	1	22	0	3 50					

Parted ; time running, 1*h.* 23*m.* 55*s.*; no bottom.

June 22.—Saw a few small flying-fish and but little sea-weed. Bottled a bunch of this weed, which floated low in the water, and on which the larger berries were old, and the main stems were withered and much incrusted with coralline substances, with small stems, leaves, and berries growing from them, looking fresh, and indicating a second growth. At 3 p. m., with furled sails, got good temperature observations from the brig. No bottom at 1,000 fathoms; cast from the boat; used triple size fishing-line, which parted unaccountably before current observations could be made.

June 23.—Saw but little sea-weed. Took temperature sounding from the brig; sounded from boat; no bottom at 1,000 fathoms, and tried currents. The line (triple size) parted in reeling up. It was a new line, but the reel off which it came had, it appears, been injured by a leak in the deck.

June 24.—Sounded and tried current from boat. No bottom at 1,000 fathoms. The current at 10 fathoms seems rather less than the surface current, and considerably less than that at 80 fathoms depth. Saw but little sea-weed.

June 25.—At 5*h.* 10*m.* a. m. furled sails and took temperatures from the brig; sounded from a boat; no bottom at 600 fathoms; sea rough; noticed some old and some fresh looking sea-weed, and some large and some small flying-fish. At 6 p. m. again furled sail and took temperature soundings. No bottom at 345 fathoms. The lines came in much inclined. Saw two sail. At night had heavy rain and much lightning.

June 26.—Noticed some stale sea-weed in lines parallel with the wind. Saw one sail, several large sea birds, and a whale, spouting low. Furled sail and took temperature soundings, a. m. and p. m., no bottom at either cast, with 345 fathoms line. A subsequent exami-

nation of our surface temperatures along this part of the sea (eastward of the Gulf Stream) indicates soundings.

June 27.—At 4h. a. m. furled sail and took temperatures from brig; sounded from a boat; sea rough; no bottom at 700 fathoms. Caught a shark. Saw many sea birds, but little sea-weed, and a few large flying-fish.

June 28.—At midnight took temperatures with sails furled. At 8 a. m. saw a shoal of porpoises and noticed a change in the color of the sea. At noon, sea a light blue color. At 4 p. m., sea-water of an olive green color. At 4h. 40m. p. m. furled sail and took temperatures from brig, and got bottom, on the outer edge of soundings, at 1,460 fathoms, sounding from a boat with one 32-pound shot and waxed fishing line, and tried currents with the boat so anchored.

JUNE 28, 1852.

Latitude $36^{\circ} 4' 21''$ N., \odot m.; *longitude* $73^{\circ} 59' 0''$ W., \odot p. m.

BOAT SOUNDING.—MR. MAYO.

Fathoms.	Time P. M.			Intervals.	Fathoms.	Time P. M.			Intervals.
	<i>h.</i>	<i>m.</i>	<i>s.</i>	<i>m.</i> <i>s.</i>		<i>h.</i>	<i>m.</i>	<i>s.</i>	<i>m.</i> <i>s.</i>
Started...	4	53	35		800	5	7	25	2 23
100	4	54	20	0 45	900	5	9	58	2 33
200	4	55	36	1 16	1,000	5	12	38	2 40
300	0	0	0	0 0	1,100	5	15	26	2 48
400	4	58	48	3 12	1,200	5	18	17	2 51
500	5	0	40	1 52	1,300	5	21	19	3 2
600	5	2	47	2 7	1,400	5	24	25	3 6
700	5	5	2	2 15	1,490	5	28	15	3 50

Time running, 34m. 40s.; bottom at 1,460; in 33m. 23s.

No sea-weed seen to-day. Many sail in sight. At 6h. p. m. picked up and bottled a specimen of weed, such as is found in bays and sounds, very much encrusted with barnacles. The currents given in the columns are each the mean of three agreeing trials.

June 29.—In discolored water.

June 30.—Foggy weather. At 6 p. m. bent cables. At 7h. p. m. in 23 fathoms water.

July 1.—At daylight the highlands of Navesink in sight. At 8 a. m. in tow of steam-tug, furled sail, &c. At noon anchored off the navy-yard, New York. Sent the powder to the magazine. The crew, after an arduous and confining cruise of eight months, [during which the Dolphin had been but 40 days in port to obtain supplies and rate chronometers, having touched at but three open, and these very sickly, ports, viz: Porto Praya, where there was much mortality from African fever, and Pernambuco and Pará, where the yellow fever prevailed, and where it was impracticable to allow the men liberty,] were soon discharged. The five passed midshipmen, after a severe surveying cruise, in which each of them had performed duties similar to those of a lieutenant and master combined, received three months' leave of ab-

sence; but so great was the necessity for their services that three of them were ordered to sea in one month, another in two months, the other in about three months' time from the date of the leave of absence, whilst the last-named had already been for two months on duty, since our return; consequently, the services of none of these officers, who were familiar with its operations, were available in bringing up the results of the cruise. A serious injury to an eye of the commanding officer, received in the latter part of the cruise, occasioned still more delay in presenting this report.

ABSTRACT LOG

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OF

THE UNITED STATES SURVEYING BRIG DOLPHIN,

LIEUT. SAMUEL PHILLIPS LEE, UNITED STATES NAVY, COMMANDER,

BOUND FROM

NEW YORK TO THE CAPE VERDE ISLANDS.

Abstract log of the United States surveying brig *Dolphin*, Lieut. Sanne
the Cap

Date.	Latitude.	Longitude.	Surface current.		Under currents.		
			From vessel.		From boat.		
			Direction.	Knots per hour.	Direction.	Knots per hour.	Under currents.
	North.	West.					
1851.							
Oct. 8, noon ..	40 21 28 ☉	73 45 8 ☉					
8 p. m. ..	40 4 47 ☉ m.	73 22 19 " p. m.					
9, 4 a. m. ..	39 51 51 " m.	72 35 39 " a. m.					
noon. .	39 52 45 " . . .	72 42 26 ☉	N. 58° E. .	0.6			
2.30 p. m. ..	39 52 49 " m. . .	72 49 26 " p. m. . .			NW. by W. .	0.5	{ 10 NW by W. 0.5 20 NW by W. 0.5
8 p. m. ..	39 43 9 * m.	72 37 6 " p. m.					
10, 4 a. m. .	39 33 5 ☉ m.	72 14 31 " a. m.					
7.30 a. m. ..	39 18 19 " m. . .	72 1 33 " a. m. . .					
noon .	38 59 7 " m.	71 44 39 ☉	S. 40° E. .	0.6			
1 p. m. ...	38 58 11 " m.	71 47 8 " p. m.					
8 p. m. .	38 21 43 " m.	71 24 9 " p. m.					
11, 4 a. m. ...	37 56 51 D. R. . .	71 0 8 D. R. . .					
7 a. m. .	37 39 51 " . . .	70 57 0 " . . .					
noon.	37 33 27 " . . .	70 58 50 " . . .					
8 p. m. .	37 35 0 " . . .	70 30 0 " . . .					
12, 4 a. m. ...	37 52 0 ☉ m.	70 10 0 ☉ a. m.					
noon.	37 56 0 " . . .	69 56 26 ☉					
8 p. m. .	38 20 0 " m. . .	69 1 41 " p. m. . .					
13, 4 a. m. ...	38 27 0 " m. . .	68 13 41 " a. m. . .					
noon . .	38 22 0 " m. . .	67 15 41 ☉	S. 74° E. .	3.1			
8 p. m. .	38 34 0 " m.	67 2 41 " p. m.					
14, 4 a. m. .	38 25 0 " m.	66 40 41 " a. m.					
noon .	38 23 0 " . . .	66 42 41 ☉	N 51° W. .	0.2			
2 p. m. .	38 27 0 " m. . .	66 42 0 ☉					
8 p. m. .	38 26 12 " m.	66 41 42 " p. m.					
15, 4 a. m. .	38 21 36 " m. . .	66 40 35 " a. m. . .					
10 a. m. .	39 15 58 " m. . .	66 41 35 " a. m. . .					
noon. .	38 14 16 " . . .	66 43 35 ☉	N. 86° E. .	1.0			
8 p. m. .	37 42 46 " m.	66 47 35 " p. m.					
16, 2.30 a. m. ..	37 33 0 " m.	66 57 15 " a. m.					
4 a. m. .	37 31 0 " m.	66 52 35 " a. m.					
noon.	37 43 0 " . . .	66 6 5 ☉	N. 80° E. .	2.5			
8 p. m. .	37 43 0 " m.	66 16 5 " p. m.					
17, 4 a. m. ...	37 56 30 " m.	66 43 5 " a. m.					
8.10 a. m. .	37 52 0 " m.	66 50 2 " a. m.					

* *Lee, United States navy, commander, bound from New York to islands.*

Time.	Temp., air.		Temp., water.		Transparency fathoms.	Deep sea soundings.	Winds.		Clouds.			Weather.
	Mast-head.		Under surface.				Direction per compass.	Force.	Class.	Portion.	Distance from.	
	Deck.	9 a. m.	3 p. m.	Surface.									Temperature.	Depth.
30.18	61	...	66 1/2	60	...	...	WNW	3	...	...	...	b
30.18	61	...	...	61	...	...	SSW	3	...	...	...	b
30.31	59	...	...	56	...	...	SSW	3	...	...	...	b w
30.37	73	64	67	61	{ 61 57 54 }	{ 12 22 27 }	Calm	...	...	...	...	b w
30.34	71	...	...	61	...	...	Calm	...	...	...	...	b w
30.30	68	...	...	60	...	...	E	1	...	...	...	b w
30.14	64	...	...	60	...	...	E. by N	2	...	...	...	b w
30.18	69	...	...	63	{ 60 56 }	{ 50 200 }	E. by N	3	...	...	...	b
30.18	69	67	70	...	...	...	E. by N	2	Cl, ci cu	1	Sd. & Ed.	b
30.11	71	...	...	66	{ 62 54 }	{ 100 200 }	ESE	4	...	...	...	b
30.06	69	...	...	63	...	...	ESE to NE. by E	4	Cl, cu S	4	Sd. & Ed. Sd.	b c
30.08	70	...	...	66	...	...	E. by S	4	Cl cu, cu S	6	Sd. & Ed.	b c
30.03	71	...	...	75	67	250	E. by S	5	...	...	Sd.	b c o
30.01	72	74	78	74	...	...	E. to SE. by E.	4	Cu, cu S	10	Nd. & Wd. Sd. & Ed.	o q
30.10	71	...	...	71	...	...	East.	5	Cu S, N	9	Sd. & Ed.	q p o
30.08	73	...	...	77	...	...	East	6	Cl	9	Eastward Nd.	b c
30.05	79	77	78	79	...	...	SE.	7	Cl cu	7	Sd. & Ed Wd.	b c
30.00	79	...	...	78	...	...	S. by E	5	Cl, cu	8	Sd & Wd	b c
30.01	76	...	...	74	...	...	S., E. by W.	5	Cu	8	Sd & Wd Sd. & Wd	b c
30.02	77	75	76	71	...	...	S. by W	6	Cl cu, cu S	5	Nd & Ed	b c
30.05	78	...	...	78	...	...	SSW Sd. and Wd	10	Cu N...	10	SW	o p q
30.08	74	...	...	69	...	...	W. by N	...	Cl, cu, N.	7	Westward.	o
30.07	75	76	75	72	...	...	Nd & Wd.—Sd. & Wd., variable	3	Cl cu, S.	...	...	b c
30.30	73	...	...	72	...	...	SW. by S	2	...	...	...	b a
30.31	73	...	...	72	...	...	SW.	3	Cl, cu	...	...	b c
30.30	67	...	...	69	...	...	SW., Nd. and Wd.	6	N	10	W	o q
30.30	68	...	...	74	...	...	NW. by W.	3	...	...	Wd.	...
30.35	66	67	67	74	{ 68 47 }	{ 200 300 }	NW.	3	Cu S, ci	7	NW. Wd.	o—b c
30.33	69	...	...	76	...	...	WNW, NW.	4	Cu S, ci...	7	NW	b c
30.30	66	...	...	76	...	...	NW. by N	3	...	...	...	b c
30.30	66	...	...	77	...	...	NW.	3	Cu S	5	W	b c
30.30	66	65	63	77	...	...	Nd. & Wd., Nd	5	Cu S, ci cu	7	Northward Nd & Ed.	b o q
30.11	61	...	...	77	...	...	NE. to N by W.	4	Cl cu, cu	7	Nd. Nd. & Wd.	b c
30.30	66	...	...	76	61	400	Nd. and Ed. to E. by W.	4	Cu	8	Nd.	b c
30.30	66	...	...	77	...	...	NE.	4	...	...	...	o

Abstract log of the United States surveying brig Dolphin, Lieut.

Date.	Latitude.	Longitude.	Surface current.				Under currents.			
			From vessel.		From boat.		Depth.	Direction.	Knots per hour.	
			Direction.	Knots per hour.	Direction.	Knots per hour.				
1881.	North.	West.								
Oct. 17, noon ...	88 7 0 ☉	66 46 36 ☉	East.	3 2						
6.3 p. m.	88 8 24 * p. m.	67 3 0 " p. m.								
8 p. m. ...	88 8 18 " p. m.	67 9 35 " p. m.								
18, 1 45 a. m.	88 10 0 D R.	67 26 0 D R.								
4 a. m. ...	88 10 0 " ...	67 25 0 " ...								
6 42 a. m.	88 9 0 " ...	67 31 0 " ...								
noon ...	88 8 0 " ...	67 22 36 " ...								
8 p. m. ...	88 9 0 " ...	67 19 35 " ...								
19, 4 a. m. ...	88 10 12 " ...	67 9 35 " ...								
noon ...	88 9 0 " ...	67 4 20 " ...								
8 p. m. ...	88 9 24 " ...	66 36 20 " ...								
20, 4 a. m.	88 1 12 ☉ m ...	66 4 20 " ...								
9 20 a. m.	87 44 40 " m ...	65 26 5 ☉ p. m.								
10 a. m.	87 43 0 " m. ...	65 23 28 " p. m.								
noon ...	87 44 0 " ...	65 20 30 " p. m.								
8 p. m. ...	87 17 0 " m. ...	65 22 28 " p. m.								
21, 4 a. m. ...	86 55 6 " m. ...	65 47 0 " a. m.								
noon ...	86 52 54 " ...	65 57 0 ☉	S. 23° W	0.8						
5 p. m. ...	86 53 0 " m.	66 12 28 " p. m.	NE...	1 0						
8 p. m. ...	87 3 0 * p. m.	66 15 23 " p. m.								
22, 4 a. m. ...	87 19 58 " m ...	65 51 0 " a. m.								
noon ...	87 26 5 " ...	65 43 16 ☉	S. 56° E.	0 5						
4.30 p. m.	87 30 35 " m ...	65 59 44 " p. m.								
8 p. m. ...	87 28 36 " m. ...	66 6 23 " p. m.								
23, 4 a. m. ...	87 45 36 D. R. ...	66 0 0 " a. m.								
noon ...	87 31 28 ☉ ...	65 48 30 " a. m.	S. 45° E.	0.6						
8 p. m. ...	87 18 39 * p. m.	65 6 21 " a. m.								
24, 4 a. m. ...	86 29 53 " a. m.	65 29 6 " a. m.								
noon ...	85 50 11 ☉	65 57 45 ☉	South	0 4						
8 p. m.	85 45 15 * p. m.	65 56 12 " p. m.								
25, 4 a. m. ...	85 42 24 ☉ m.	65 59 58 " a. m.								
9.30 a. m.	85 48 36 " m ...	65 59 46 " a. m.								
noon ...	85 52 24 " ...	65 50 46 ☉	S. 76° W	0.2						
2 p. m. ...	85 53 6 " m. ...	65 56 12 " p. m.								
8 p. m. ...	85 51 44 " m ...	66 26 0 " p. m.								
26, 4 a. m.	85 54 0 * a. m.	66 14 0 * a. m.								
8 a. m. ...	85 57 0 ...	65 51 ...								
noon ...	85 53 2 ☉ ...	65 35 46 ☉	N. 45° W.	0 5						
8 p. m. ...	85 50 0 " m. ...	66 33 6 " p. m.								
27, 4 a. m. ...	85 55 40 * a. m.	66 13 21 " a. m.								
noon ...	85 56 24 ☉ ...	65 55 14 ☉	S. 77° E...	0 4						
8 p. m. ...	85 53 13 " m. ...	65 32 0 " p. m.								

and Phillips Lee, United States navy, commander—Continued.

St.	Baro- meter.	Temp., air.		Temp., water.			Transparency fathoms.	Deep sea soundings.	Winds.		Clouds.			Weather.	
		Deck.	Mast-head.		Surface.	Under surface.			Direction per compass.	Force.	Class.	Portion.	Direction from.		
			9 a. m.	3 p. m.		Temperature.									Depth.
28	30.10	63	59	60	75			0	NE.....	4	Cu S.....	8	N.	b c	
								480					NE.		
	30.18	61			75			0	ENE.....	4				b c	
								400							
	30.18	61			75				ENE.....	4	Cl cu.....	6	Nd. & Ed.	b c	
	30.16	64			72				Nd. and Ed.....	4				b c	
	30.15	64			71				ENE.....	4	Cl, cu.....	5	Eastward.	b c	
								0							
	30.16	67			71	61	400	81	East.....					o	
								400							
	30.11	70	66	69	71				E. SE. by E.....	7	Cu.....	6	Eastward.	o	
	29.92	63			76				E. by S., ENE.....	10	Cu S, N...	10	Nd. & Ed.	o q u d g	
	29.64	69			77				SE. by E., SSE.....	10	N.....	10	Sd. & Wd.	o q u r	
	29.58	75	72	75	78				SSE., E.....	10	N.....	10	Sd. & Ed.	o q u g r	
													Sd. & Wd.		
	29.68	71			75				SW. to W. by S...	9	Cu, cu S..	9		o—b c	
													Nd. & Wd.		
	29.74	70			75				W., W. by N.....	6	Cu.....	7	Nd. & Wd.	b c	
								0							
	29.83	71			74	70	200		NW.....	6				b c	
								200							
	29.87	72			74				NW.....	6				b c	
								0							
	29.90	72	72	71	75				WNW. NW.....	6	Cu.....	6	Nd. & Wd.	b c	
								820							
	29.95	71			73				W. by N., W. by S.	5	Cu, ci cu..	4	Nd. & Wd.	b c	
24	29.97	67			73				WNW., calm.....		S, cu S....	3	Nd. & Wd.	b c	
	30.06	72	72	72	72				N. to NE.....	1	Cl cu.....	7	Nd. & Ed.	b c	
								0							
	30.04	72			73	69 } 66 }	200 } 367 }	10	NNE.....	2				b c	
								500							
	30.05	68			73				ENE., NNE.....	2	Cl cu.....	6	Nd. & Ed.	b c	
								0							
	30.05	69			73				E. by N., SE.....	2	Cu S, ci S..	5	Sd. & Ed..	b c	
								400							
	30.08	73	73	71	73				S., SE.....	2	Cl cu.....	6	Sd. & Ed..	b c	
								1175							
	30.00	73			73			0	SW.....	2				b c	
								500							
	29.97	70			73				SW., SSW.....	2	Cl cu, cu S	8	Sd. & Ed..	b c	
	29.80	70			75				SSW.....	5	N.....	8	Sd. & Wd.	o q r u	
	29.86	68	72	64	75				Wd., N. by W....	5	Cu S.....	10	Nd. & Wd.	o q u—b c	
	29.86	63			78				North.....	3	Cu S, N...	8	Nd. & Ed.	o q p	
	30.00	63			71				NW.....	4	Cu, cu S, N	9	Nd. & Wd.	q p b c	
	30.10	65	63	59	71				NW., N.....	4	Cu.....	7	Nd. & Wd.	b c	
	30.10	66			72				Calm.....		Cu S, N...	7		b c	
	30.02	64			71				Calm.....		Cu S.....	9	Sd. & Wd.	o	
	30.06	66			71				ENE.....	2				o	
	30.08	69	68	71	72				ENE., SE.....	2	Cu S, ci cu	10		b c	
								0							
	29.98	71			73	66 } 66 }	200 } 400 }		S. by W.....	4				b c	
								1000							
	29.94	71			72				S. by W.....	4	Cu S, cu ..	9	Sd. & Wd.	b c—o	
25	29.81	71			72				South.....	4	Cu S.....	5	Sd. & Wd.	b c	
	29.80	75	74	74	72				S., S. by E.....	4	Cu.....	4	Southward	b c	
	29.68	72			73				S. by E.....	5	Cu.....	5	Sd. & Ed.	b c	
	29.42	71			72				S. to SW.....	8	N cu.....	3	Sd. & Wd.	o u r q l	
	29.51	73	73	64	72				SW., W.....	7	Cu S.....	6	Sd. & Wd.	b c	
	29.55	68			71				WNW., NW.....	9	Cu.....	8	NW.....	b c	

Abstract log of the United States surveying brig Dolphin,

Date.	Latitude	Longitude.	Surface currents.				Under cu	
			From vessel.		From boat.		Depth.	Direct
			Direction.	Knots per hour.	Direction.	Knots per hour.		
	North.	West.						
1851.								
Oct. 29, 4 a. m...	35 46 10 ☉ m	65 47 10 ☉ a. m.						
noon...	35 6 57 "	65 49 15 ☉ a. m.	S. 84° W.	1 2				
4.30 p. m	34 54 0	65 29 0						
8 p. m	34 41 57 ☉ m	65 7 15 ☉ p. m.						
29, 4 a. m	34 36 57 " m	64 45 15 " a. m.						
noon	34 57 9 "	64 38 26 ☉ a. m.	North	0 8				
4 p. m.	35 5 0	64 55 0						
8 p. m.	35 13 9 ☉ m	64 51 26 ☉ p. m.						
30, 4 a. m	34 56 9 " m...	64 31 26 " a. m.						
noon.	35 18 59 "	65 7 37 ☉ a. m.	N 66° W	1 0				
8 p. m	35 26 59 " m	65 8 21 ☉ p. m.						
31, 4 a. m...	35 29 11 " m	64 39 15 D. R.						
noon.	35 22 30 "	64 4 15 "						
6 p. m	35 13 20 " m	63 31 15 "						
Nov. 1, 4 a. m...	34 59 0 " m	62 43 15 ☉ a. m.						
noon.	34 36 37 "	61 49 0 ☉ a. m.						
8 p. m	33 50 43 * p. m.	61 9 20 " p. m.						
2, 4 a. m	33 10 0 ☉ m	60 41 20 " a. m.						
noon.	32 46 26 "	60 24 0 ☉ a. m.	S. 61° W	0 4				
8.30 p. m.	32 46 0 " m	60 6 0 " p. m.						
5 p. m	32 46 0 " m...	59 56 15 " p. m.						
8 p. m.	32 46 45 " m	59 56 20 " p. m.						
3, 4 a. m	32 53 45 " m.	59 45 32 " a. m.						
9 a. m.	33 1 0	59 59 0 a. m.						
noon	33 3 21 ☉ m	60 10 31 ☉ a. m.	N 52° E	0.6				
8 p. m	33 8 0 " m.	60 24 31 " p. m.						
4, 4 a. m	33 7 53 * a. m.	60 15 13 * a. m.						
noon..	33 4 39 * a. m.	60 10 44 ☉ a. m.	S. 60° E.	0 7				
8 p. m	33 0 5 " p. m.	59 56 11 " p. m.						
5, 4 a. m	32 50 12 " a. m.	59 50 37 " a. m.						
noon	32 45 28 ☉ ..	59 45 5 ☉ a. m.	S 16° E.	0 5				
8 p. m.	32 44 30 " m	59 47 8 " p. m.						
6, 4 a. m.	32 45 33 * a. m.	59 46 32 * a. m.						
noon..	32 49 12 ☉ ...	59 49 24 ☉ a. m.	N. 43° W	0 5				
8 p. m	32 46 0 " m	60 5 8 " p. m.						
8 p. m.	32 45 35 " m...	60 3 45 " p. m.						
7, 4 a. m.	32 31 41 D. R.	60 10 9 D. R.						
noon.	32 40 29 "	60 14 26 "						
8 p. m.	32 35 26 "	60 26 3 "						
8, 4 a. m	32 31 6 ☉ m	60 23 6 ☉ a. m.						
noon....	32 35 59 "	60 24 9 ☉ a. m.						
8 p. m....	32 39 55 " m...	59 56 26 " p. m.						
9, 4 a. m....	32 36 33 " m...	59 48 2 " a. m.						

Samuel Phillips Lee, United States navy, commander—Continued.

Vari- les.	Baro- meter.	Temp., air		Temp., water			Deep sea soundings.	Winds	Clouds.		Weather.			
		Deck.	Mast- head.		Surface	Under surface.			Direction per compass	Class		Portion.	Direction from.	
			0 4. M.	2 P. M.		Temperature								Depth.	Transparency fathoms.
Wed.	30 06	82			72			NW	4 Cu S, cu	7 NW	b c			
	30 19	67	65	60	73			N. to NE	3 Cu, cu S	9 Nd & Ed	b c			
Th.	30 20	66			71			NE, ENE	4 Cu	6 NE	b c			
	30 28	67			73			ENE	4 Cu, cu S	5 Nd & Ed	b c			
	30 28	70	68	70	72			NE, ENE	5 Cu	8 Nd & Ed	b c—o			
Fri.	30 26	69			72			ENE, East, E. by N	5 Cu S, N 4 Cu, cu S	9 Nd & Ed 7 Eastward	b c q b c			
	30 15	71			71			Eastward	4 Cu	9 Eastward Wd.	o q—b c			
	30 08	69			71			E. by S	3 Cl, cu S	7	b c			
	29 67	69			72			SE, ESW	2 Cu	4	b c			
Sat.	29 74	73	70	71	73			S. by W...	4 Cu S, N...	10 Ed & Wd	o q p			
	29 79	71			71			S. to ESW	4 Cu S, N	8 Ed & Wd	o q			
	29 68	71			73			SW, NW	5 Cu, N	9 Nd & Wd	b c q p			
	29 15	75	71	72	72			NNW	5 Cu	6 NW	b c			
	29 30	69			72			NNW	4 Cu	6 NW	b c—m			
	29 08	68			71			NW	5 Cu	6 NW...	b c			
	29 34	72	69	72	73			NW, NNE	4 Cu	6	b c			
Sun.	29 32	73			74			N. by W	2	8 Nd. & Ed	b c			
	29 34	72			74	71 60 200: 400	0 800	N by W	2			b c		
	29 36	72			74			N., N by W.	2 Cl cu	4 Northward	b c			
	29 32	71			73			S., SW	3 Cu	5 Ed & Wd.	b c			
Mon.	29 68	77	71	75	78			SSW, SW	5 Cu S, cl	5 Ed & Wd.	b c			
	29 76	75			79			SW, SSW	6 Cl S, cl cu	6 Ed & Wd	b c			
	29 08	71			78			SW by W	6 Cl cu, N	7 Ed & Wd	o r—b c			
	29 67	78	75	71	78			SW	6 Cl cu, N	7 SW	b c—q r			
	29 09	70			79			WNW to WSW	4 Cl cu, cl S	7 Ed & Wd	o—b c			
	29 79	70			78			West	5 Cu, N	7 W.	b c q p			
	29 34	71	70	70	78			WNW, NW by W.	5 Cu	5 Nd & Wd	b c			
	29 34	66			73			W by N. to NNW	3 Cu		b c			
	30 00	70			72			Calm		9 Nd, & Wd	b c			
	30 10	72	69	72	72			Calm	Cu	8 Nd & Ed	b c			
	30 00	75			72	68 59 200: 400	0 500	E by N	3		b c			
	30 05	75			73			NE, E by N	3 Cl	8 Nd & Wd	b c			
	29 31	71			73			SSE	4 Cu S, cl S	9 Southward	o—b c			
	29 79	76	70	75	73			SSE, SE.	4 Cu	10 Ed & Wd	o			
	29 78	71			73			S. by E to W	7 Cu S, N	10 Westward. W	o			
	29 60	71			72			W by N WNW	4 Cl cu, cu	9	o—b c			
	29 09	73	71	70	72			WNW, to N	2 Cu S, N.	9 NW	o d			
	29 32	69			73			N., NNE	6 N, cu.	9 Northward	o p q			
	29 30	67			73			N. by W., NNE	4 Cl cu, cu.	9 Nd. & Ed.	b c			

Abstract log of the United States surveying brig Dolphin, Lieut.

Date	Latitude	Longitude	Surface currents.		Under currents.	
			From vessel.		From boat.	
			Direction.	Knots per hour.	Direction.	Knots per hour.
1851.	North	West.				
Nov 9, noon	32 32 33	59 21 44	N 86° E	1 0		
6 p. m.	32 18 21	59 4 2				
10, 4 a. m.	32 4 54	58 48 3				
noon	32 18 50	58 46 44	N 88° E	0 0		
8 p. m.	32 19 7	58 49 2				
11, 4 a. m.	31 53 47	58 30 18				
8 a. m.	31 42 0	58 11 0				
noon	31 32 3	57 51 49	S. 40° W	0 2		
8 p. m.	31 53 32	58 25 32				
12, 4 a. m.	31 58 25	58 14 0				
noon	32 7 3	58 30 15	West.	0 9		
8 p. m.	31 56 26	58 19 35				
13, 4 a. m.	32 3 14	58 26 22				
noon	32 6 15	58 40 55	North	0 2		
1 p. m.	32 6 0	58 40 52				
8 p. m.	32 9 19	58 22 29				
14, 4 a. m.	32 12 22	58 11 11				
9 a. m.	32 10 16	58 9 35				
noon	32 8 43	57 51 40	None			
8 p. m.	32 8 49	56 47 40				
15, 4 a. m.	31 53 55	55 31 40				
noon.	31 31 11	54 2 50	S. 27° E.	0 4		
4 p. m.	31 17 0	53 40 0				
6 10 p. m.	31 17 0	53 21 35				
8 p. m.	31 17 21	53 22 12				
16, 4 a. m.	31 4 49	53 27 25				
noon	31 7 50	53 28 27	S. 24° W	0 6		
4 p. m.	31 17 0	53 12 0				
8 p. m.	31 18 32	52 46 50				
17, 4 a. m.	31 13 50	51 57 54				
noon	31 4 47	50 58 38	S. 15° W	0 2		
4 30 p. m.	31 3 48	50 6 34				
8 p. m.	31 3 43	49 34 57				
18, 4 a. m.	31 3 48	48 22 57				
5 1/2 a. m.	31 1 0	47 58 0				
noon.	30 58 50	47 25 48	S. 11° E.	0 1		
4 p. m.	30 56 50	46 54 48				
8 p. m.	31 0 0	46 29 44				
19, 4 a. m.	31 1 0	45 24 56				

Samuel Phillips Lee, United States navy, commander—Continued.

Vari- don.	Baro- meter.	Temp., air.		Temp., water.			Transparency fathoms.	Deep sea soundings.	Winds.		Clouds.			Weather.
		Deck.	Mast-head.	Surface.	Temperature.	Depth.			Direction per compass.	Force.	Class.	Portion.	Direction from.	
W. 2.			0 a. m.	2 p. m.										
.....	30.05	70	66	69	78				NNE.....	7 Cu	.....	7 Nd. & Ed.		b c
.....	30.06	68			78				NE..	6 Cu S.....	.....	9 Nd. & Ed.		b c
.....	30.15	69			78				NE.....	6 Cu, cu S..	.....	8 NE.....		b c q
.....	30.19	71	69	70	78				NE. by E. to E...	6 Cu S.....	.....	9 NE.		b c q—o
.....	30.16	69			78				E. by N. to NE..	5 Cu, cu S..	.....	7 Eastward Ed.		b c
.....	30.11	68			78				ENE.....	4 Cu	.....	6 NE.		b c
10 40 E														.....
.....	30.15	71	69	70	74				E. by N. to NNE.	4 Cu	.....	7 NE.....		b c
.....	30.04	69			73				NE. to N. by E..	6 Cu S.....	.....	7 N.....		b c
.....	30.02	69			78				N., N. by E.....	5 Cu	.....	6 Northward		b c
.....	30.08	68	69	66	78				NNW. to N. by E.	5 Cu S, N...	.....	6 Northward		b c—o q r
.....	30.11	67			78				NNE. to N.....	7 Cu S.....	.....	8 Northward		b c q
.....	30.09	61			72				N., NNE.....	6 Cu S, N...	.....	9 Nd. & Wd.		b c q p
.....	30.07	68	61	64	72				N., NNE.....	4 Cu, cu S..	.....	5 Nd. & Ed.		b c
.....	30.05	65			73	{ 67 200 68 400 }	91	0 400	North.....	2	.....			b c
.....	29.96	68			72				N., NNW., W. by N.	8 Cu	.....	8 Nd. & Wd.		b c
.....	29.91	65			72				West.....	6 Cu, cu S..	.....	8 W.....		b c
.....	29.91	70			72			0	NNW.....	8	.....			b c
.....	29.90	72	68	69	72			300	W. by N., NNW..	7 Cu S, N...	.....	9 W.....		b c q p
.....	29.92	65			72				N., N. by E.....	6 Cu S, N...	.....	9 W.....		b c q
.....	29.95	65			70				N.....	6 Cu	.....	6 N.....		b c
.....	29.96	68	65	67	70				N. by E.....	6 Cu	.....	7 N.....		b c
11 20 S														.....
.....	29.99	67			70	{ 66 200 62 400 }		0 500	N. by E.....	5	.....			b c
.....	29.99	67			70				N., N. by E.....	5 Cu, cu S..	.....	7 N.....		b c
.....	29.99	67			71				North.....	5 Cu S, N...	.....	8 Northward		.....
.....	29.97	69	68	70	71				N., N. by W.....	6 Cu S, cl cu	10	Northward		.....
12 30 S														.....
.....	29.94	69			71				N. by W.....	7 N, cu S...	.....	9 N.		b c q p
.....	29.88	68			71				N. N. by W.....	7 N, cu S...	.....	6 Nd. & Ed.		b c q
.....	29.84	70	68	70	72				N. to NE. by N..	6 Cu S, N...	.....	6 Northward		b c p q
13 10 S	29.80	69			71	{ 66 200 63 400 }	15	0 400	NE. by N.....	5	.....			b c
.....	29.80	69			71				NE. by N.....	6 Cu	.....	Nd. & Ed.		b c
.....	29.75	67			70				NNE.....	6 Cu, cu S, N	.....	7 Northward		b c p q
13 20 S														.....
.....	29.79	69	64	70	70				NNE.....	5 Cu, cl, N...	.....	5 Nd. & Ed.		b c
.....	29.70	69			70	{ 67 200 65 400 }	91	0 400	NNW.....	5	.....	Northward		b c q p
.....	29.75	69			70				NNW.....	5 Cu, cu S, N	.....	5 Northward		b c q p
.....	29.70	69			70				NNW., NW.....	5 Cu S.....	.....	4 Nd. & Wd.		b c q

Abstract log of the United States surveying brig Dolphin, Lieut. Samuel the Cape

Date.	Latitude.	Longitude.	Surface current.				Under currents.			
			From vessel.		From boat.		Depth.	Direction.	Knots per hour.	
			Direction.	Knots per hour.	Direction.	Knots per hour.				
1851.	North.	West.								
Oct. 8, noon	40 21 23 ☉.....	78 45 8 ☉ ———								
8 p. m....	40 6 47 ☉ m....	78 22 19 " p. m.								
9, 4 a. m....	39 51 51 " m....	72 35 39 " a. m.								
noon....	39 52 45 "	72 42 26 ☉ ———	N. 58° E..	0.6						
2.30 p. m	39 52 49 " m....	72 42 26 " p. m.			NW. by W.	0.5	{ 10 NW. by W. 0.5 20 NW. by W. 0.5			
8 p. m....	39 48 8 * m....	72 37 6 " p. m.								
10, 4 a. m....	39 23 5 ☉ m....	72 14 31 " a. m.								
7.30 a. m	39 18 19 " m....	72 1 38 " a. m.								
noon....	38 59 7 " m....	71 44 39 ☉ ———	S. 40° E..	0.6						
1 p. m....	38 58 11 " m....	71 47 8 " p. m.								
8 p. m....	38 21 43 " m....	71 24 8 " p. m.								
11, 4 a. m....	37 50 51 D. R....	71 5 8 D. R....								
7 a. m....	37 39 51 "	70 57 0 "								
noon....	37 38 27 "	70 58 50 "								
8 p. m....	37 35 0 "	70 30 0 "								
12, 4 a. m....	37 52 0 ☉ m....	70 10 0 ☉ a. m.								
noon....	37 59 0 "	69 56 26 ☉ ———								
8 p. m....	38 20 0 " m....	69 1 41 " p. m.								
13, 4 a. m....	38 27 0 " m....	68 18 41 " a. m.								
noon....	38 22 0 " m....	67 15 41 ☉ ———	S. 74° E..	3.1						
8 p. m....	38 24 0 " m....	67 2 41 " p. m.								
14, 4 a. m....	38 25 0 " m....	66 40 41 " a. m.								
noon....	38 23 0 "	66 42 41 ☉ ———	N. 51° W.	0.2						
2 p. m....	38 27 0 " m....	66 42 0 ☉ ———								
8 p. m....	38 26 12 " m....	66 41 42 " p. m.								
15, 4 a. m....	38 21 36 " m....	66 40 35 " a. m.								
10 a. m....	38 15 58 " m....	66 41 35 " a. m.								
noon....	38 14 16 "	66 42 35 ☉ ———	N. 86° E..	1.0						
8 p. m....	37 42 46 " m....	66 47 35 " p. m.								
16, 2.30 a. m	37 33 0 " m....	66 57 15 " a. m.								
4 a. m....	37 31 0 " m....	66 52 35 " a. m.								
noon....	37 43 0 "	66 6 5 ☉ ———	N. 80° E..	2.5						
8 p. m....	37 43 0 " m....	66 16 5 " p. m.								
17, 4 a. m....	37 53 30 " m....	66 43 5 " a. m.								
3.10 a. m	37 52 0 " m....	66 50 3 " a. m.								

Phillips Lee, United States navy, commander, bound from New York to Verde islands.

Vari- tion.	Baro- meter.	Temp., air.		Temp., water.			Transparency fathoms.	Deep sea soundings.	Winds.		Clouds.			Weather.	
		Deck.	Mast- head.		Surface.	Under surface.			Direction per compass.	Force.	Class.	Portion.	Distance from.		
			9 a. m.	3 p. m.		Temperature.									Depth.
W. 21.															
	30.18	61	66½	60					WNW.	8				b	
	30.18	64		61					SSW	8				b	
	30.21	59		58					SSW	8				b w	
5 41 ☉	30.27	78	64	67	61	{ 61 12 57 22 54 27 }			Calm					b w	
}	30.24	71		61				82	Calm					b w	
	30.20	68		60				6	East.	1				b w	
	30.16	64		60					E. by N.	2				b w	
6 55 ☉	30.16	69		65	{ 60 50 56 200 }			0	E. by N.	3				b	
	30.18	69	67	70	66			200	E. by N.	2	Cl, cl cu	1	Sd. & Ed.	b	
	30.11	71		66	{ 62 100 54 200 }			0	ESE.	4				b	
	30.06	69		68				200	ESE. to NE. by E.	4	Cl, cu S.	4	Sd. & Ed. Sd.	b c	
	30.02	70		68					E. by S.	4	Cl cu, cu S	6		b c	
	29.98	71		75	57	250		0	E. by S.	5			Sd. & Ed.	b c o	
	30.01	72	74	78	74			250	E. to SE. by E.	4	Cu, cu S.	10		o q	
	30.16	71		71					East.	5	Cu S, N.	9	Nd. & Wd. Sd. & Ed.	q p o	
	29.86	75		77					East.	6	Cl.	9	Eastward. Nd.	b c	
	29.98	79	77	78	79				SE.	7	Cl cu.	7		b c	
	30.00	79		78					S. by E.	5	Cl, cu	8	Sd. & Ed. Wd.	b c	
	30.02	76		72					S., S. by W.	5	Cu	8	Sd. & Wd. Sd. & Wd. Sd. & Wd.	b c	
	29.92	77	75	76	71				S. by W.	6	Cl cu, cu S	8		b c	
	29.85	78		78					SSW. Sd. and Wd.	10	Cu N.	10	Nd. & Ed. SW.	o p q	
	29.98	74		69					W. by N.	8	Cl, cu, N.	7	Westward.	o	
	29.97	75	76	75	72				Nd. & Wd.—Sd. & Wd., variable.	8	Cl cu, S.			b c	
	29.90	73		72				0	SW. by S.	2				b c	
	29.91	72		72				250	SW.	8	Cl, cu			b c	
9 17 ☉	29.89	67		69					SW., Nd. and Wd.	6	N	10	W.	o q	
	29.98	68		74					NW. by W.	8					
	29.95	68	67	67	74	{ 58 200 47 300 }		0	NW.	8	Cu S, cl.	7	Wd.	o—b c	
	29.98	69		76				300	WNW., NW.	4	Cu S, cl.	7	NW. Wd.	b c	
	30.08	68		76				0	NW. by N.	8			NW.	b c	
	30.08	68		77				420	NW.	8	Cu S.	5	W.	b c	
	30.06	66	65	62	77				Nd. & Wd., Nd.	5	Cu S, cl cu	7	Northward Nd. & Ed.	b c q	
	30.11	61		77					NE. to N. by W.	4	Cl cu, cu.	7		b c	
	30.14	60		76	51	400		0	Nd. and Ed. to N. by W.	4	Cu	6	Nd. Nd. & Wd.	b c	
	30.18	60		77				400	NE.	4			Nd.	o	

Abstract log of the United States surveying brig Dolphin, Lieut—

Date.	Latitude.	Longitude.	Surface current.				Under currents.		
			From vessel.		From boat.				
			Direction.	Knots per hour.	Direction.	Knots per hour.	Depth.	Direction.	Knots per hour.
1851.	North.	West.							
Nov. 28, noon.....	25 5 24 ☉	86 17 53 ☉ a. m.	S. 25° E..	0.4					
1 p. m....	25 4 0 " m....	86 12 53 " p. m.							
8 p. m....	24 56 54 ☾	85 42 58 " p. m.							
29, 4 a. m....	24 46 12 ☉ m....	84 43 28 " a. m.							
noon.....	24 27 16 "	88 59 10 ☉ a. m.	None						
0.50 p. m.	24 28 40 " m....	82 54 40 ☉ p. m.							
8 p. m....	23 57 0 " m....	83 19 40 " p. m.							
30, 4 a. m....	23 48 12 " m....	82 40 47 " a. m.							
6.50 a. m.	23 42 12 " m....	82 39 0 " a. m.							
noon.....	23 41 12 "	82 39 5 ☉ a. m.	S. 68° E..	0.2	ENE	0.5			
3 p. m....	23 41 12 " m....	82 39 5 " p. m.							
8 p. m....	23 41 12 " m....	82 39 5 " p. m.							
Dec. 1, 4 a. m....	23 20 5 * a. m.	82 25 19 * a. m.							
noon.....	23 9 48 ☉	82 24 2 ☉ a. m.	S. 27° E..	0.4					
3 p. m....	23 15 8 " m....	82 24 32 " p. m.							
8 p. m....	23 17 17 " m....	82 33 32 " p. m.							
2, 4 a. m....	23 22 0 " m....	82 24 30 " a. m.							
noon.....	23 19 59 "	82 14 58 ☉ a. m.	S. 33° W..	0.4					
8 p. m....	23 40 33 " m....	82 4 52 " p. m.							
3, 4 a. m....	24 3 37 " m....	82 24 29 " a. m.							
noon.....	24 5 55 "	82 12 43 ☉ a. m.	S. 60° W..	1.1					
2 p. m....	24 8 0 " m....	82 7 12 " p. m.							
8 p. m....	23 46 0 " m....	81 53 0 " p. m.							
4, 4 a. m....	23 28 9 " m....	81 23 8 " a. m.							
noon.....	22 59 39 "	80 43 27 ☉ a. m.	S. 24° W..	0.8					
4 p. m....	22 47 0	80 32 0 p. m.							
8 p. m....	22 35 46 ☉	80 16 27 ☉ p. m.							
5, 4 a. m....	21 59 0 " m....	29 33 42 " a. m.							
8 a. m....	21 45 0	29 25 0 a. m.							
noon.....	21 30 20 ☉	29 11 42 ☉ a. m.	S. 30° E..	0.4					
1.35 p. m.	21 37 20 " m....	29 9 12 " p. m.							
4 p. m....	21 18 0	28 54 0							
8 p. m....	20 58 32 ☉ m....	28 37 42 ☉ p. m.							
6, 4 a. m....	20 22 6 " m....	28 2 12 " a. m.							
8 a. m....	20 12 0	27 47 0							
9.50 a. m.	20 2 54 ☉ m....	27 33 30 ☉ a. m.							
noon.....	20 1 48 "	27 34 18 ☉ a. m.	S. 45° W..	0.3					
8 p. m....	19 31 40 ☉ m....	26 45 6 " p. m.							
7, 4 a. m....	18 57 20 * a. m.	26 4 22 " a. m.							
8 a. m....	18 45 0	25 38 0							
10.30 a. m	18 39 26 ☉ m....	25 24 16 ☉ a. m.							

Samuel Phillips Lee, United States navy, commander—Continued.

Vari- ation	Baro- meter	Temp., air			Temp., water			Transparency fathoms.	Deep sea soundings.	Winds.		Clouds.			Weather
		Mast- head.			Surface	Under surface.				Direction per compass	Force	Class.	Portion	Direction from.	
		Deck	6 a. m.	3 p. m.		Temperature	Depth.								
16.4	29.73	77			75				0	N., NW	3 Cu, ci	6	Northward	b c	
	29.76	79			74	69 200 62 400	16		1000	WNW	4		Nd.	b c	
	29.78	75			74					NW, WNW	4 Cu	6	Nd. & Wd	b c	
	29.78	75			78					NW by W	4 Cu, N	6	Nd. & Wd	b c	
	29.66	75	71		75					WSW to NNE, by way of W & N.	5 Cu S, N	9	Nd. & Wd.	a-b c q r	
	29.66	76			75	68 200 68 400			0	NE. by N	4			b c	
	29.92	74			74				400	NE by N, NE. by E.	4 Cu S	6	Nd. & Ed	a-b c	
	29.96	70			78				2180	NE. by E.	3 Cu, cu S.	5	Nd. & Ed.	b c	
17.0	29.96	72			79	69 200 66 400			0	NE. by E	1			b c	
	30.06	75	76		77					NE by E, NE. by N	1 Cu, ci S	5	Nd. & Ed.	b c	
	30.34	77			77	68 200 70 400	32			Calm				b c	
	30.09	72			76					Calm	1 Cu S	8	Nd. & Ed.	b c	
	30.01	72			75					East	1 Cu S	8	Eastward	b c	
	30.06	77			77					Ed. & Ed., variable	1 Cu, N	6	Ed. & Wd	b c-q p	
	30.05	79			75	64 200 61 400	16		2900	SE. by E	1			b c v	
	30.07	71			75				0	SE. to E, by N.	2 Cu	3	Ed. & Ed.	b c v	
	29.96	70			75					E. by S	3 Cu	5	Eastward	b c	
	30.14	78			75		74			E., E. by S	3 Cu	5	Eastward	b c	
	30.14	74			75					ESE., East	4 Cu, cu S	5	Eastward	b c	
	30.12	73			74					E., ESE	4 Cu, cu S, N	6	Eastward	b c-o q	
	30.19	77	74	73	75					E. to ENE	4 Cu S	7	Nd. & Ed	b c	
17.20	30.12	75			75	68 200 61 400			0	E. by N	3			b c	
	30.15	76			74				400	E. to ENE	3 Cu	6	Eastward	b c	
	30.10	71			75					ENE., NE	5 Cu S, N	7	Nd. & Ed.	b c p q	
	30.10	76	72		75					E., ENE.	4 Cu	6	Nd. & Ed	b c q	
18.20	30.05	78			74					ENE	6 Cu, cu S	6	Nd. & Ed.	b c	
18.40	30.03	79			75					ENE., E by N.	5 Cu S	6	Nd. & Ed.	b c q	
	30.05	77	74	74	75				0	E. by N	5 Cu	6	Nd. & Ed.	b c	
	30.04	78			75	70 200 68 400			400	E. by N	5			b c	
19.20	30.09	78			75					E. by N	5 Cu	6	Nd. & Ed.	b c	
19.40	30.00	72			75					ENE...	5 Cu S	6	Nd. & Ed.	b c	
	30.02	78			75	67 200 63 400	18		0	ENE	5			b c	
	30.02	78	74	74	75				400	ENE	5 Cu S, N	6	Nd. & Ed.	b c q	
	30.01	72			75					E. by N., ENE	5 Cu, cu S	6	Nd. & Ed.	b c	
20.00	30.00	70			75					ENE...	5 Cu, cu S	6	Nd. & Ed.	b c	
	30.00	72			75				1970	ENE...	5			b c	
	30.00	72			75	60 200 61 400	12		0	ENE...	5			b c	

Abstract log of the United States surveying brig Dolphin, Lieut

Date.	Latitude.	Longitude.	Surface currents.				Under currents.		
			From vessel.		From boat.		Depth.	Direction.	Knots per hour.
			Direction.	Knots per hour.	Direction.	Knots per hour.			
1851.	North.	West.							
Dec. 7, noon.....	18 39 2 ☉	25 26 4 ☉ a. m.	S. 65° W..	0.4					
4 p. m....	18 19 14 " m....	25 5 10 " p. m.							
8 p. m....	18 19 55 " m....	25 4 16 " p. m.							
8, 4 a. m....	17 44 53 * a. m.	24 17 53 * a. m.							
noon.....	17 58 28 ☉	24 14 38 ☉ a. m.	S. 14° W..	0.4					
4.20 p. m.	17 38 23 " m....	23 48 0 " p. m.							
8 p. m....	17 36 28 " m....	23 38 38 " p. m.							
9, 4 a. m....	17 36 51 * a. m.	23 35 50 * a. m.							
8 a. m....	18 0 0	23 54 0							
noon.....	18 22 30 ☉	24 11 17 ☉ a. m.	S. 53° W..	0.7					
8 p. m....	18 47 16 " m....	24 23 50 " p. m.							
10, 4 a. m....	18 10 40 * a. m.	23 55 46 * a. m.							
9.20 a. m.	18 11 23 ☉ m....	23 48 28 ☉ a. m.							
noon.....	18 11 5 " "	23 44 59 ☉ a. m.	West	0.3					
4 p. m....	17 56 0	23 27 0							
5 p. m....	17 42 7 * p. m.	23 10 12 ☉ p. m.							
11, 4 a. m....	17 49 16 " a. m.	23 11 25 * a. m.							
9 a. m....	17 34 31 ☉ m....	22 50 27 ☉ a. m.							
noon.....	17 27 19 " "	22 43 13 ☉ a. m.	S. 75° W..	0.3					
4 p. m....	17 10 0	22 23 0							
8 p. m....	16 52 5 * p. m.	22 3 2 ☉ p. m.							
12, 4 a. m....	16 24 9 " a. m.	21 23 21 " a. m.							
noon.....	15 57 58 ☉	20 50 32 ☉ a. m.	S. 13° E..	0.4					
4 p. m....	16 17 0	20 53 0							
8 p. m....	16 37 2 ☉ m....	20 56 8 ☉ p. m.							
13, 4 a. m....	16 32 33 * a. m.	20 49 9 * a. m.							
noon.....	16 29 31 ☉	20 56 31 ☉ a. m.	South.....	0.4					
0.42 p. m.	16 29 31 " m....	20 58 1 ☉ p. m.			ESE.....	0.7	60 ESE.....	0.6	
8 p. m....	16 22 41 * p. m.	20 53 43 * p. m.							
14, 4 a. m....	16 18 12 " a. m.	20 34 50 * a. m.							
8.40 a. m.	16 34 10 ☉ m....	20 47 36 ☉ a. m.							
noon.....	16 33 13 " "	20 53 43 ☉ a. m.	S. 36° W..	0.4					
9 p. m....	16 58 22 * p. m.	21 23 38 " p. m.							
15, 4 a. m....	16 44 39 " a. m.	21 16 11 * a. m.							
7.30 a. m.	16 59 0 ☉ m....	21 13 0 ☉ a. m.							
noon.....	16 59 37 " "	21 36 2 ☉ a. m.	S. 30° W..	0.4					
0.20 p. m.	16 59 0 " m....	21 38 2 ☉ p. m.							
9 p. m....	16 36 48 * p. m.	22 2 53 * p. m.							
16, 4 a. m....	15 36 45 " "	21 50 43 ☉ a. m.							
6 a. m....	15 24 8 ☉ m....	21 46 43 " a. m.							

Samuel Phillips Lee, United States navy, commander—Continued.

Lat. Long.	Baro- meter.	Temp., air.			Temp., water.			Transparency fathoms.	Deep sea soundings.	Winds.		Clouds.			Weather.
		Deck.	6 a. m.	9 p. m.	Surface.	Temperature.	Depth.			Direction per compass.	Force.	Class.	Portion.	Direction from	
10 00	30 00	75	72	73	73	...	...	...	1675	ENE	5 Cu, cu s	4 Nd. & Ed			bc
10 10	29 25	75	...	...	75	69	600	...	0	E. by N	5				bc
10 20	29 29	73	...	...	75	...	...	...	...	E. by N, ENE.	5 Cu	5 Nd. & Ed.			bc
10 30	30 00	71	...	...	75	...	...	...	...	ENE	6 Cu	5 Nd. & Ed.			bc
10 40	29 50	74	73	74	75	...	...	...	0	NE. by E, ENE	5 Cu	5 Nd. & Ed.			bc
10 50	29 54	75	...	...	75	...	...	14	400	ENE	5				bc
11 00	30 00	73	...	...	75	...	...	...	...	ENE, NE. by N.	5 Cu cu	4 Nd. & Ed.			bc
11 10	30 00	73	...	...	75	...	...	...	...	NE, NE. by E	5 Cu s, cu	5 Nd. & Ed.			bc q
11 20	30 00	75	74	74	75	...	...	...	...	NE	5 Cu	5 Nd. & Ed.			bc
11 30	30 04	73	...	...	74	...	...	...	...	NE. by E.	5 Cu	5 Nd. & Ed.			bc
11 40	29 59	74	...	...	75	...	...	...	...	ENE	5 Cu, cu s	7 Nd. & Ed.			bc
11 50	30 01	73	...	...	75	65	200	14	1613	E. by N	5				bc
12 00	30 03	73	73	74	75	...	...	...	0	E. by N, ENE	5 Cu	5 Nd. & Ed.			bc
12 10	30 04	74	...	...	75	...	...	...	...	E. to NE. by E	5 Cu	5 Nd. & Ed.			bc
12 20	29 56	71	...	...	75	...	...	...	...	ENE, NE. by E	5 Cu, N	5 Nd. & Ed.			bc q
12 30	30 01	73	...	...	75	65	200	17	1870	E. by N	5				bc
12 40	30 02	75	73	73	75	...	...	...	0	NE. by E. to E	5 Cu	4 Nd. & Ed.			bc
12 50	29 59	73	...	...	74	...	...	...	...	East	5 Cu	5 Nd. & Ed.			bc
13 00	29 57	71	...	...	74	...	...	...	...	E. to ENE	4 Cu	5 Nd. & Ed.			bc
13 10	30 02	75	74	75	75	...	...	...	...	E. to NE. by E	5 Cu	5 Nd. & Ed.			bc
13 20	30 04	71	...	...	74	...	...	...	...	E., E. by N	5 Cu	5 Nd. & Ed.			bc
13 30	30 00	72	...	...	75	...	...	...	...	E. to NE	5 Cu s, cu	5 Nd. & Ed.			bc
13 40	30 04	73	71	74	75	...	...	...	...	NE. by E	4 Cu	5 Nd. & Ed.			bc
13 50	30 01	70	...	...	75	67	200	16	1941	NE. by E	5				bc
14 00	30 03	71	...	...	74	...	...	...	0	NE, NE. by E	5 Cu, cu s	5 Nd. & Ed.			bc
14 10	29 55	73	...	...	75	...	...	...	...	ENE to NE. by N.	5 Cu	5 Nd. & Ed.			bc
14 20	30 03	74	...	...	75	70	200	91	1875	NE	5				bc
14 30	30 04	77	73	74	75	64	400	15	1500	NE	5 Cu	4 Nd. & Ed.			bc
14 40	30 00	73	...	...	75	...	...	...	...	NE by N, NE by E.	5 Cu	4 Nd. & Ed.			bc m
14 50	30 03	71	...	...	74	...	...	...	...	E. by N, ENE	5 Cu	4 Nd. & Ed.			bc m
15 00	30 03	75	...	...	75	64	200	...	...	ENE	5				bc
15 10	30 03	77	75	75	74	...	...	...	...	ENE	5 Cu, cu cu	5 Nd. & Ed.			bc m
15 20	30 03	77	...	...	74	67	200	11	1550	ENE	5				bc m
15 30	30 01	73	...	...	75	...	...	...	0	ENE	5 Cu	1 Nd. & Ed.			bc m
15 40	29 57	71	...	...	75	...	...	...	...	ENE, E. by N	5 Cu	1 Nd. & Ed.			bc m w
15 50	29 57	71	...	...	74	67	200	...	1220	E. by N.	5				bc

Abstract log of the United States surveying brig Dolphin,

Date.	Latitude.	Longitude.	Surface current.				Under c	
			From vessel.		From boat.			
			Direction.	Knots per hour.	Direction.	Knots per hour.	Depth.	Direc
1851.	North.	West.						
Dec. 16, con. ...	15 6 44 \odot	22 0 0 \odot $\frac{\text{a. m.}}{\text{p. m.}}$	S. 80° W..	0.4				
4.30 p. m.	15 9 20 " m....	22 28 48 " p. m..			WSW.....	0.8		
8 p. m....	15 11 19 " m....	22 37 5 " p. m..						
17, 4 a. m....	15 4 34 " m....	22 22 51 " a. m..						
7.35 a. m.	15 8 0 " m....	22 56 57 " a. m..						
noon.....	15 2 57 "	23 9 51 " a. m..						
0.30 p. m.	15 2 57 " m....	23 12 51 " a. m..						
8 p. m....	.....	.....				

Samuel Phillips Lee, United States navy, commander—Continued.

Vari- tion.	Baro- meter	Temp., air.			Temp., water.			Transparency fathoms.	Deep-sea soundings.	Winds. Direction per compass.	Force.	Clouds.		Weather.	
		Deck.	Mast- head.		Surface.	Under surface						Class.	Portion.		Direction from
			G. A. M.	3 P. M.		Temperature.	Depth.								
W. at															
	30 00	77	74	75	75	...	17	..	E, by N, NE.	5	Cu, ci	5	Nd. & Ed	b c m	
Is 36	29 57	74	...	...	73	{ 68 50 61 100 58 200 51 400 }	1380	0	NE	5	...	...	...	b c m
	29 57	75	...	...	75	...	...	...	ENE. to NE. by N	4	Cu. . .	5	Nd. & Ed	b c m w
	29 54	73	...	...	75	...	...	...	NE., NE. by N ...	4	S.	5	Nd. & Ed.	b c m
	30 00	73	...	...	73	{ 73 200 67 400 }	1120	0	NE. by N	4	...	...	...	c
	29 58	73	73	74	73	...	16	...	NE. by N., NNE	4	Cu .	5	Nd. & Ed.	b c—o	
	29 56	80	...	...	74	{ 87 50 82 100 }	790	0	N. by W	5	...	...	...	c
	29 55	75	...	...	...	...	...	...	N by W., NNE	5	Cu, ci cu	5	Nd & Ed	b b c m
											1				

Abstract log of the United States surveying brig Dolphin, Lieut. Samuel Praya, St. Jago

Date.	Latitude	Longitude.	Surface currents.				Under currents.	
			From vessel.		From boat.		Depth.	Direction.
			Direction.	Knots per hour.	Direction.	Knots per hour.		
	North	West.						
1851.								
Dec. 16, 4 a. m.								
noon								
8 p. m.								
17, 4 a. m.								
noon								
8 p. m.								
18, 4 a. m.								
noon								
8 p. m.								
19, 4 a. m.								
noon								
8 p. m.								
20, 4 a. m.								
noon								
8 p. m.								
21, 4 a. m.								
noon								
8 p. m.								
22, 4 a. m.								
noon								
8 p. m.								
23, 4 a. m.								
noon								
8 p. m.								
24, 4 a. m.								
noon								
8 p. m.								
25, 4 a. m.								
noon								
8 p. m.								
26, 4 a. m.								
noon								
8 p. m.								
27, 4 a. m.								
noon								
8 p. m.								
28, 4 a. m.								
noon								
8 p. m.								
29, 4 a. m.								
noon								
8 p. m.								
30, 4 a. m.								
noon								
8 p. m.								
31, 4 a. m.								
noon								
8 p. m.								
1852.								
Jan. 1, 4 a. m.								
noon								
8 p. m.								
2, 4 a. m.								
noon								
8 p. m.								

*United States navy, commander, at anchor, harbor of Porto
lands.*

Wp., air.		Temp., water		Transparency fathoms.	Deep sea soundings.	Winds.		Clouds.			Weather	
Mast-head.	5 a. m.	9 p. m.	Under surface.			Direction per compass.	Force	Class.	Portion.	Direction from.		
			Surface.									Temperature.	Depth.
66	76					NNE, NE	1 Cu		0	Nd. & Ed	b c m	
						NE	1 Cu		0	"	b c m	
						NE to ENE	5 Cu		0	"	b c m	
67	73					ENE	1 Cu		0	"	b c m	
		75				ENE	4 Cu		0	"	b c m	
		75				NE	5 Cu		0	"	b c m	
		75				NE	1 Cu		0	"	b c m	
68	75					NE	2 Cu		0	"	b c m	
		75				ENE	5 Cu		0	"	b c m	
		75				ENE, NE	2 Cu		0	"	b c m	
69	77					NE, Nd. & Ed	2 Cu		0	"	b c m	
		75				NE	2 Cu, cu s		0	"	b c m	
		75				NE by E	1 Cu		0	"	b c m	
69	77					North, East	2 Cu		0	"	b c m	
		75				E. by S, ESE	2 Cu		0	"	b c m	
		75				SE by E, ESE	1 Cu		0	"	b c m	
73	79					ENE, E by N	5 Cu		0	"	b c m	
		75				ENE	5 Cu		0	"	b c m	
		75				ENE	2 Cu		0	"	b c m	
71	75					ENE, NNE	2 Cu s, cu		0	"	b c m	
		75				NE by E, NE	2 Cu		0	"	b c m	
		75				NE by E, NNE	2 Cu		0	"	b c m	
71	77					NNE, NE	4 Cu		0	"	b c m	
		75				NE	4		0	"	b c m	
		75				NE	2		0	"	b c m	
71	77					NE by N	4 Cl, cl cu		0	Nd. & Ed	b c m	
		75				NE by E	4		0	"	b c m	
		75				NE by E, NE by N	4		0	"	b c m	
70	75					NE	4		0	"	b c m	
		75				NE by N to ENE	4		0	"	b c m	
		75				ENE, NE	4		0	"	b c m	
71	75					NE	5 Cu		1	"	b c m	
		75				NE	5 Cu		2	"	b c m	
		75				NE, NE by E	3 Cu		1	"	b c m	
69	73					NE by E, NE	4 Cu		3	"	b c m	
		75				E by N, NE by N	5 Cu		3	"	b c m	
		75				NE, NE by E	1 Cu		2	"	b c m	
70	74					N by E to ENE	4 Cu		5	"	b c m	
		75				NE by E	3 Cu		2	"	b c m	
		75				E by N, ENE	1 Cu s, cu		4	"	b c m	
69	75					ENE to NE by N	4 Cu		4	"	b c m	
		75				NNE to NE by E	4 Cl cu		4	"	b c m	
		75				NE by E	1 Cu		3	Nd. & Ed	b c m	
69	75					NE, NE by N	4 Cu		4	"	b c m	
		75				NNE, NE	3 Cu		4	"	b c m	
		75				NE by E to NE by N	4 Cu		3	"	b c m	
71	77					NE by E to NE by N	4 Cu, cl cu		4	"	b c m	
		75				E by N, NE	3 Cl, cl s		5	"	b c m	

Abstract log of the United States surveying brig Dolphin, Lieut.

Date.	Latitude.	Longitude.	Surface current.				Under currents.	
			From vessel.		From boat.		Depth.	Direction.
			Direction.	Knots per hour.	Direction.	Knots per hour.		
1851.	North.	West.						
Nov. 28, noon.....	25 5 24 ☉	36 17 58 ☉ a. m. —	S. 25° E..	0.4				
1 p. m....	25 4 0 " m....	36 12 53 " p. m. —						
8 p. m....	24 56 54 ☾	35 42 53 " p. m. —						
29, 4 a. m....	24 46 12 ☉ m....	34 43 23 " a. m. —						
noon.....	24 27 16 "	33 59 10 ☉ a. m. —	None					
0.50 p. m.	24 23 40 " m....	32 54 40 ☉ p. m. —						
8 p. m....	23 57 0 " m....	33 19 40 " p. m. —						
30, 4 a. m....	23 48 12 " m....	32 40 47 " a. m. —						
6.50 a. m.	23 42 12 " m....	32 39 0 " a. m. —						
noon.....	23 41 12 "	32 39 5 ☉ a. m. —	S. 68° E..	0.2	ENE.....	0.5		
3 p. m....	23 41 12 " m....	32 39 5 " p. m. —						
8 p. m....	23 41 12 " m....	32 39 5 " p. m. —						
Dec. 1, 4 a. m....	23 20 5 * a. m.	32 25 19 * a. m. —						
noon.....	23 9 48 ☉	32 24 2 ☉ a. m. —	S. 27° E..	0.4				
3 p. m....	23 15 8 " m....	32 24 32 " p. m. —						
8 p. m....	23 17 17 " m....	32 33 32 " p. m. —						
2, 4 a. m....	23 22 0 " m....	32 24 30 " a. m. —						
noon.....	23 19 59 "	32 14 58 ☉ a. m. —	S. 33° W..	0.4				
8 p. m....	23 40 33 " m....	32 4 52 " p. m. —						
3, 4 a. m....	24 3 37 " m....	32 24 29 " a. m. —						
noon.....	24 8 55 "	32 12 48 ☉ a. m. —	S. 60° W..	1.1				
2 p. m....	24 8 0 " m....	32 7 12 " p. m. —						
8 p. m....	23 46 0 " m....	31 53 0 " p. m. —						
4, 4 a. m....	23 28 9 " m....	31 28 8 " a. m. —						
noon.....	22 59 39 "	30 48 27 ☉ a. m. —	S. 24° W..	0.8				
4 p. m....	22 47 0	30 32 0 p. m. —						
8 p. m....	22 35 46 ☉	30 16 27 ☉ p. m. —						
5, 4 a. m....	21 59 0 " m....	29 33 42 " a. m. —						
8 a. m....	21 45 0	29 25 0 a. m. —						
noon.....	21 30 20 ☉	29 11 42 ☉ a. m. —	S. 30° E..	0.4				
1.35 p. m.	21 37 20 " m....	29 9 12 " p. m. —						
4 p. m....	21 18 0	28 54 0						
8 p. m....	20 58 32 ☉ m....	28 37 42 ☉ p. m. —						
6, 4 a. m....	20 22 6 " m....	28 2 12 " a. m. —						
8 a. m....	20 12 0	27 47 0						
9.50 a. m.	20 2 54 ☉ m....	27 33 30 ☉ a. m. —						
noon.....	20 1 45 "	27 34 18 ☉ a. m. —	S. 45° W..	0.3				
8 p. m....	19 31 40 ☉ m....	26 45 6 " p. m. —						
7, 4 a. m....	18 57 20 * a. m.	26 4 22 " a. m. —						
8 a. m....	18 45 0	25 38 0						
10.30 a. m	18 39 26 ☉ m....	25 24 16 ☉ a. m. —						

Phillips Lee, United States navy, commander, bound from the Cape Verde nambuco, Brazil.

Vari- ation.	Baro- meter.	Temp., air.		Temp., water.				Deep sea soundings.	Winds.		Clouds.			Weather.
		Mast- head.		Surface.	Under surface.		Transparency fathoms.		Direction per compass.	Force.	Class.	Portion.	Direction from.	
		Deck.	6 a. m.		2 p. m.	Temperature.									Depth.
11 44	29.99	75			75			0	NE.	4	Cu, ci cu.	3 Nd. & Ed.	b c	
	29.99	79	72	75	75	{ 62 200 54 400 }		900	NE., NW. by W.	4	Cu, ci cu.	7 Nd. & Ed.	b c m	
	29.94	77			75				NW. to NE.	4	Ci cu.	6 Nd. & Ed.	b c	
	29.94	75			75				ENE. to NNE.	8	Cu	6 Eastward.	b c	
	29.95	76	72	75	75				Variable.	2	Ci s.	7 Nd. & Ed.	b c m	
	29.99	75			75				SE., NE., variable.	2	Ci s.	4 Nd. & Ed.	b c	
	29.97	73			75				NE. to NNE.	2	Cu	2 Nd. & Ed.	b c	
	29.06	79	78	75	75				NE., NNE.	4	Cu	6 Northward.	b c	
	29.02	75			75				NNE., variable.	5	Cu	2 Nd. & Ed.	b c	
	29.99	71			74				ENE.	6	Cu	6 Nd. & Ed.	b c	
11 44								0						
	29.99	76			75	{ 65 200 63 400 }	14	650	NE. by E.	6			b c m	
	29.95	77	71	75	75				NE. by E.	6	Cu	6	b c m	
11 44														
	29.95	75			75				ENE., E. by N.	6	Cu	7 Eastward.	b c	
	29.05	74			75			1160	E. by N.	5	Cu	6 Eastward.	b c	
	29.94	76			75	{ 64 200 61 400 }		0 1120	E. by N.	4			b c	
16 51								0						
	29.94	77	74	77	75				E. by N.	4	Cu	4 Eastward.	b c	
16 51														
	29.92	76			76				E. by N., NE.	4	Cu	4 Eastward.	b c	
	29.90	75			77				NE.	8		0	b m	
17 17														
	29.94	63			78	{ 64 200 57 400 }		2270 0	NE. by N.	3			b c	
	29.94	63	74	76	78				NE. by N.	3	Cu	3 Nd. & Ed.	b c	
	29.91	75			77				NE.	4	Cu	6 Nd. & Ed.	b c	
	29.99	76			78			2650	ENE.	3	Ci s, cu s.	7 Sd. & Wd.	b c m	
	29.99	75			75	{ 69 200 59 400 }		0 1940	ENE.	2			b c m	
	29.96	78		80	79			0	ENE.	2	Cu s, ci cu	9 Eastward.	b c m	
	29.91	76			79				E. to N. by E.	2	Cu	7 Sd. & Ed.	b c m	
17 39	29.94	77			79				NNE. to ENE.	3	Cu	6 Sd. & Ed.	b c	
	29.93	63	78	81	80				ENE., NE.	2	Cu	4 Eastward.	b c m	

Abstract log of the United States surveying brig Dolphin, Lieut .

Date.	Latitude.	Longitude.	Surface currents.				Under currents.		
			From vessel.		From boat.		Depth.	Direction.	Knots per hour.
			Direction.	Knots per hour.	Direction.	Knots per hour.			
1851.	North.	West.							
Dec. 7, noon.....	18 39 2 ⊙	25 26 4 ⊙ a. m.	S. 65° W..	0.4					
4 p. m....	18 19 14 " m ...	25 5 10 " p. m.							
8 p. m....	18 19 55 " m....	25 4 16 " p. m.							
8, 4 a. m....	17 44 53 * a. m..	24 17 53 * a. m.							
noon.....	17 53 23 ⊙	24 14 38 ⊙ a. m.	S. 14° W..	0.4					
4.20 p. m.	17 38 23 " m....	23 43 0 " p. m.							
8 p. m....	17 36 23 " m....	23 33 33 " p. m.							
9, 4 a. m....	17 36 51 * a. m..	23 35 50 * a. m.							
8 a. m....	18 0 0	23 54 0							
noon.....	18 22 30 ⊙	24 11 17 ⊙ a. m.	S. 53° W..	0.7					
8 p. m....	18 47 16 " m....	24 23 50 " p. m.							
10, 4 a. m....	18 10 40 * a. m..	23 55 46 * * a.m.							
9.20 a. m.	18 11 23 ⊙ m....	23 43 23 ⊙ a. m.							
noon.....	18 11 5 "	23 44 59 ⊙ a. m.	West	0.3					
4 p. m....	17 56 0	23 27 0							
8 p. m....	17 42 7 * p. m..	23 10 12 ⊙ p. m.							
11, 4 a. m....	17 49 16 " a. m..	23 11 25 * * a.m.							
9 a. m....	17 34 31 ⊙ m....	22 50 27 ⊙ a. m.							
noon.....	17 27 19 "	22 43 13 ⊙ a. m.	S. 75° W..	0.8					
4 p. m....	17 10 0	22 23 0							
8 p. m....	16 52 5 * p. m..	22 3 2 ⊙ p. m.							
12, 4 a. m....	16 24 9 " a. m..	21 23 21 " a. m.							
noon.....	15 57 58 ⊙	20 50 32 ⊙ a. m.	S. 18° E..	0.4					
4 p. m....	16 17 0	20 53 0							
8 p. m....	16 37 2 ⊙ m....	20 56 8 ⊙ p. m.							
13, 4 a. m....	16 32 33 * a. m..	20 49 9 * a. m.							
noon.....	16 29 31 ⊙	20 56 31 ⊙ a. m.	South.....	0.4					
0.42 p. m.	16 29 31 " m....	20 53 1 ⊙ p. m.			ESE.....	0.7	60	ESE.....	0.5
8 p. m....	16 22 41 * p. m..	20 53 43 * p. m.							
14, 4 a. m....	16 18 12 " a. m..	20 34 50 * a. m.							
8.40 a. m.	16 34 10 ⊙ m....	20 47 36 ⊙ a. m.							
noon.....	16 33 13 "	20 53 43 ⊙ a. m.	S. 36° W..	0.4					
8 p. m....	16 53 22 * p. m..	21 23 33 " p. m.							
15, 4 a. m....	16 44 39 " a. m..	21 16 11 * a. m.							
7.30 a. m.	16 59 0 ⊙ m....	21 13 0 ⊙ a. m.							
noon.....	16 59 37 "	21 36 2 ⊙ a. m.	S. 30° W..	0.4					
0.20 p. m.	16 59 0 " m....	21 33 2 ⊙ p. m.							
8 p. m....	16 36 46 * p. m..	22 2 53 * p. m.							
16, 4 a. m....	15 36 45 "	21 50 43 ⊙ a. m.							
6 a. m....	15 24 S ⊙ m....	21 46 43 " a. m.							

Lee, United States navy, commander—Continued.

Lat. Long.	Temp., water.		Transparency fathoms.	Deep sea soundings.	Winds.		Clouds.			Weather	Force of vapor, and relative humidity.		
	Surface.	Under surface.			Direction per compass.	Force.	Class.	Portion.	Direction from.		Hour.	Force of vapor.	Humidity.
28° 30' N. 79° 00' W.	60	{ 70 200 60 400 }		0	NE.	1				b c.	1 p. m.	21.07	71
28° 30' N. 79° 00' W.	60			2019	NE., ENE.	1	Cu	8	Sd. & Ed.	b c.			
28° 30' N. 79° 00' W.	79				NE. to N.	2	Cl cu, cu s.	5	Sd. & Wd.	b c m l.	8 a. m.	21.69	77
28° 30' N. 79° 00' W.	79				North	2	Cu	2	Eastward.	b c.			
28° 30' N. 79° 00' W.	61	{ 66 200 62 200 }	14	0	N. by W.	1				b c m.	2 p. m.	20.46	65
28° 30' N. 79° 00' W.	79			2540'	N. by E., N. by W.	1	Cu	3	Northward	b c m.			
28° 30' N. 79° 00' W.	79				N., NNW	2	Cu s, N.	6	Sd. & Wd.	b c l.	8 a. m.	22.93	92
28° 30' N. 79° 00' W.	81	{ 64 200 60 400 }	17	0	N., NNE.	1	Cl cu, cu s.	8	Sd. & Wd.	b c m.			
28° 30' N. 79° 00' W.	81			2125'	NNE	1				b c.	2 p. m.	22.68	74
28° 30' N. 79° 00' W.	80				NNE., NNW.	1	Cl cu	8	Nd. & Wd. Nd.	b c.			
28° 30' N. 79° 00' W.	79				Variable	1	Cu s, N.	10		o t l.	8 a. m.	16.96	79
28° 30' N. 79° 00' W.	79				Variable	1	Cu s, N.	10	Southward Northward	o r.			
28° 30' N. 79° 00' W.	75	{ 67 200 56 400 }	17	0	Variable	1				o r.			
28° 30' N. 79° 00' W.	79				Variable	1	Cu s, N.	10	Sd. & Wd.	o p.			
28° 30' N. 79° 00' W.	79				SSW	1	Cu	5	Sd. & Wd.	b c.	8 a. m.	21.84	80
28° 30' N. 79° 00' W.	81				SSW., SW.	1	Cu, ci cu	6	Sd. & Wd.	b c.			
28° 30' N. 79° 00' W.	79	{ 70 200 58 400 }	16	2760	Calm					b c.	2 p. m.	20.46	65
28° 30' N. 79° 00' W.	79			0	Calm		Cu, cu s	5	Sd. & Wd.	b c.			
28° 30' N. 79° 00' W.	79			2760	Calm		Cu, cu s	5	Sd. & Wd.	b c m l.	8 a. m.	21.69	77
28° 30' N. 79° 00' W.	79		22	0	Calm					b c.			
28° 30' N. 79° 00' W.	82			0	Calm		Cu	6	Westward.	b c.	2 p. m.	20.76	67
28° 30' N. 79° 00' W.	79				Nd. & Wd., Sd. & Wd.	1	Cu	5		b c.			
28° 30' N. 79° 00' W.	79				SW. to WSW.	2	Cu	8	Sd. & Wd.	b c m l.	8 a. m.	21.34	80
28° 30' N. 79° 00' W.	81				W. by S., WSW.	2	Cu N.	6	Sd. & Wd.	b c.			
28° 30' N. 79° 00' W.	80	{ 69 200 56 400 }	18	0	Variable					b c q r.	2 p. m.	21.26	83
28° 30' N. 79° 00' W.	80			400	Variable	1	N, cu s.	10	Sd. & Wd.	b c q r.			
28° 30' N. 79° 00' W.	79			2725	Calm		Cu s.	10	Sd. & Wd.	o.			
28° 30' N. 79° 00' W.	80	{ 65 200 73 400 }	24	0	NE.					b c.	8 a. m.	22.93	92
28° 30' N. 79° 00' W.	83	67 1000			Variable	1	Cu	8	Sd. & Wd.	b c.			
28° 30' N. 79° 00' W.	81				Calm					b c.	2 p. m.	21.47	68
28° 30' N. 79° 00' W.	81				Calm		Cu	5	Sd. & Wd.	b c.			
28° 30' N. 79° 00' W.	81				SSE	1	Cu s.	4	Sd. & Ed.	b c l.	8 a. m.	20.73	74
28° 30' N. 79° 00' W.	82				SE.	2	Cu	4	Sd. & Ed.	b c.			
28° 30' N. 79° 00' W.	81	{ 66 200 64 400 }		2780	SSE	2				b c.	2 p. m.	20.72	74
28° 30' N. 79° 00' W.	81			0	SE., SSE.	2	Cu	5	Southward	b c.			
28° 30' N. 79° 00' W.	79				S. by E.	2	Cu s.	3	Southward	b c l.			

Abstract log of the United States surveying brig Dolphin, .

Date.	Latitude.	Longitude.	Surface current.				Under cu	
			From vessel.		From boat.		Depth.	Direct
			Direction.	Knots per hour.	Direction.	Knots per hour.		
1851.	North.	West.						
Dec. 16, con. ...	15 6 44 \odot	22 0 0 \odot $\frac{\text{a. m.}}{\text{p. m.}}$	8. 80° W..	0.4				
4.30 p. m.	15 9 20 " m....	22 28 48 " p. m..			WSW	0.8		
8 p. m....	15 11 19 " m....	22 37 5 " p. m..						
17, 4 a. m....	15 4 34 " m....	22 22 51 " a. m..						
7.35 a. m.	15 8 0 " m....	22 56 57 " a. m..						
noon.....	15 2 57 "	23 9 51 " a. m..						
0.30 p. m.	15 2 57 " m....	23 12 51 " a. m..						
8 p. m....								

Samuel Phillips Lee, United States navy, commander—Continued.

Vari- m.	Baro- meter	Temp., air.		Temp., water.		Trans- parency fathoms.	Deep sea soundings.	Winds. Direction per compass.	Force	Clouds.		Weather			
		Deck.	Mast- head.		Surface.					Under surface.			Class.	Portion.	Direction from
			S. A. M.	S. P. M.						Temperature.	Depth.				
574	80 00	77	74	75	73	...	17	E, by N, NE	5	Cu, ci	5	Nd. & Ed.	b c m		
16 50	29 97	74	...	...	75	<div><div>63 50 62 100 63 200 61 400</div></div>	<div><div>1880</div><div>0</div></div>	NE	5	...	...	...	b c m
	20 97	75	...	...	75	...	...	ENE. to NE. by N.	4	Cu	5	Nd. & Ed.	b c m w
	23 94	73	...	...	75	...	...	NE, NE. by N.	4	S...	8	Nd. & Ed.	b c m
	30 00	75	...	...	79	<div><div>73 200 67 400</div></div>	<div><div>1120</div><div>0</div></div>	NE. by N	4	...	...	...	o
	29 28	76	73	74	78	...	16	NE. by N., NNE	4	Cu ..	6	Nd. & Ed.	b c—o		
	29 40	60	.	.	74	<div><div>67 50 62 100</div></div>	<div><div>790</div><div>0</div></div>	N. by W.	5	...	...	...	o
	29 28	75	...	...	.	...	...	N by W, NNE.	<div><div>5</div><div>1</div></div>	Cu, ci cu	8	Nd. & Ed.	o b c m

Abstract log of the United States surveying brig Dolphin, Lieut. Samuel Praya, St. Jago

Date.	Latitude.	Longitude.	Surface currents.				Under currents.				
			From vessel.		From boat.						
			Direction.	Knots per hour.	Direction.	Knots per hour.	Depth.	Direction.	Knots per hour.		
	North.	West.									
1851.	"	"									
Dec. 18, 4 a. m.											
noon.											
8 p. m.											
19, 4 a. m.											
noon.											
8 p. m.											
20, 4 a. m.											
noon.											
8 p. m.											
21, 4 a. m.											
noon.											
8 p. m.											
22, 4 a. m.											
noon.											
8 p. m.											
23, 4 a. m.											
noon.											
8 p. m.											
24, 4 a. m.											
noon.											
8 p. m.											
25, 4 a. m.											
noon.											
8 p. m.											
26, 4 a. m.											
noon.											
8 p. m.											
27, 4 a. m.											
noon.											
8 p. m.											
28, 4 a. m.											
noon.											
8 p. m.											
29, 4 a. m.											
noon.											
8 p. m.											
30, 4 a. m.											
noon.											
8 p. m.											
31, 4 a. m.											
noon.											
8 p. m.											
1852.											
Jan. 1, 4 a. m.											
noon.											
8 p. m.											
2, 4 a. m.											
noon.											
8 p. m.											

Phillips Lee, United States navy, commander, at anchor, harbor of Porto Cape Verde Islands.

Vari- tied.	Baro- meter.	Temp., air.		Temp., water.			Transparency fathoms.	Deep sea soundings.	Winds. Direction per compass.	Clouds			Weather		
		Deck.	Mast head		Surface	Temperature				Depth.	Force	Clouds		Direction from	
			f m.	g f.								Class			Portion
29 93	77								NNE, NE.	1 Cu.		6	Nd. & Ed.	bcm	
29 94	75	68	76						NE	1 Cu.		6	"	bcm	
29 95	75								NE. to ENE.	3 Cu.		5	"	bc	
29 96	75								ENE.	1 Cu.		4	"	bc	
29 97	77	67	75						ENE.	4 Cu.		5	"	bc	
29 98	75			75					NE.	5 Cu.		6	"	bc	
29 99	71			75					NE.	1 Cu.		3	"	bc	
29 00	75	69	78	75					NE	3 Cu.		2	"	bc	
29 01	76			75					ENE.	3 Cu.		3	"	bc	
29 02	71			75					ENE, NE.	2 Cu.		3	"	bc	
29 03	75	69	77	75					NE, Nd. & Ed.	2 Cu.		3	"	bc	
29 04	75			75					NE.	2 Cu, cu s.		7	"	bc	
29 05	71			75					NE. by E.	1 Cu.		3	"	bc	
29 06	77	68	77						North, East.	2 Cu.		4	"	bc	
29 07	77			75					E. by S, ENE.	2 Cu.		4	"	bc	
29 08	78			75					SE. by E, SSE.	1 Cu.		4	"	bc	
29 09	78	78	79						ENE, E. by N.	3 Cu.		5	"	bc	
29 10	76			75					ENE.	3 Cu.		6	"	bc	
29 11	78			75					ENE.	3 Cu.		6	"	bc	
29 12	79	71	75	75					ENE, NNE.	3 Cu s, cu.		6	"	bc	
29 13	76			75					NE. by E, NE.	2 Cu.		3	"	bc	
29 14	75			75					NE. by E, NNE.	3 Cu.		3	"	bc	
29 15	79	71	77	75					NNE, NE.	4 Cu.		1	"	bcm	
29 16	77			75					NE	4		0	"	bcm	
29 17	75			75					NE	2		0	"	bcm	
29 18	79	71	77	75					NE. by N.	4 Cl, cl cu.		4	Nd. & Ed.	bc	
29 19	76			75					NE. by E.	4		0	"	bcm	
29 20	73			75					NE. by E, NE. by N.	4		0	"	bcm	
29 21	81	70	75	75					NE	4		0	"	bcm	
29 22	77			75					NE. by N. to ENE.	4		0	"	bcm	
29 23	75			75					ENE, NE.	4		0	"	bcm	
29 24	77	71	75	75					NE	5 Cu.		1	"	bcm	
29 25	79			75					NE	5 Cu.		2	"	bc	
29 26	78			75					NE, NE. by E.	2 Cu.		1	"	bcm	
29 27	79	69	78	75					NE. by E, NE.	4 Cu.		3	"	bcm	
29 28	77			75					E. by N, NE. by N.	5 Cu.		5	"	bc	
29 29	71			75					NE, NE. by E.	1 Cu.		2	"	bc	
29 30	77	70	74	75					N. by E. to ENE.	4 Cu.		5	"	bc	
29 31	78			75					NE. by E.	3 Cu.		2	"	bc	
29 32	78			75					E. by N, ENE.	1 Cu s, cu.		4	"	bcm	
29 33	78	69	78	75					ENE. to NE. by N.	4 Cu.		4	"	bc	
29 34	78			75					NNE. to NE. by E.	4 Cl cu.		4	"	bcm	
29 35	71								NE. by E.	1 Cu.		3	Nd. & Ed.	bc	
29 36	79	69	78	75					NE, NE. by N.	4 Cu.		4	"	bc	
29 37	75			75					NNE, NE.	3 Cu.		4	"	bc	
29 38	71			75					NE. by E. to NE. by N.	4 Cu.		3	"	bc	
29 39	77	71	77	75					NE. by E. to NE. by N.	4 Cu, cl cu.		4	"	bc	
29 40	75			75					E. by N, NE.	3 Cl, cl s.		6	"	bcm	

Abstract log of the United States surveying brig *Dolphin*, Lieut. Samuel Islands to Per

Date.	Latitude.	Longitude.	Surface current.				Under currents.	
			From vessel.		From boat.		Depth.	Direction.
			Direction.	Knots per hour.	Direction.	Knots per hour.		
1852.	North.	West.						
Jan. 8, 4 a. m.								
noon	14 45 55	23 50 24						
8 p. m.	14 46 40	24 23 16						
4, 4 a. m.								
noon								
8 p. m.								
5, 4 a. m.								
noon								
8 p. m.	14 33 0	24 22 15						
6, 4 a. m.	13 37 34	23 33 0						
8 a. m.	13 16 0	23 11 0						
11.30 a. m.	13 1 30	22 57 42						
noon	13 0 36	22 57 37	S. 41° W.	0.9				
4.30 p. m.	12 36 0	22 41 0						
8 p. m.	12 9 31	22 25 15						
7, 4 a. m.	11 19 26	22 1 54						
7.30 a. m.	11 7 15	21 56 54						
9 a. m.	10 54 0	21 52 0						
noon	10 36 57	21 43 30	West	0.7				
5½ p. m.	10 0 0	21 35 0						
8 p. m.	9 45 33	21 22 21						
8, 4 a. m.	9 5 8	21 5 18						
8 a. m.	8 57 0	20 51 0						
10 a. m.	8 43 0	20 52 0						
noon	8 42 47	20 52 18	S. 89° W.	0.4				
8 p. m.	7 53 56	20 33 13						
9, 4 a. m.	7 25 16	20 10 45						
10 a. m.	7 17 0	20 7 0			N. by W.	0.8		
noon	7 15 25	20 7 33	N. 88° W.	0.2				
8 p. m.	6 47 25	19 59 39						
10, 4 a. m.	6 0 54	19 45 45						
8 a. m.	5 58 0	19 40 0						
noon	5 43 0	19 36 55	S. 84° W.	0.4				

*Phillips Lee, United States navy, commander, bound from the Cape Verde
sambuco, Brazil.*

Time.	Therm.	Temp., air		Temp., water.			Under surface.	Transparency fathoms.	Direction per compass.	Force.	Clouds.		Weather.			
		Barometer.	Deck.	Start-head.		Surface.					Temperature.	Depth.		Class.	Portion.	Direction from.
				U. S. M.	F. M.											
11:00	29.99	75			75			0	NE	4 Cu, ci cu.	8 Nd & Ed	b c				
11:15	29.99	79	72	75	75	62 200 54 400		0	NE, NW by W	4 Cu, ci cu	7 Nd & Ed	b c m				
11:30	29.94	77			75			900	NW to NE.	4 Ci cu	6 Nd & Ed	b c				
11:45	29.90	75			75				ENE to NNE.	8 Cu	6 Eastward	b c				
12:00	29.87	83	72	75	75				Variable	2 Ci s	7 Nd & Ed	b c m				
12:15	29.99	75			75				SE, NE, variable	2 Ci s	4 Nd & Ed	b c				
12:30	30.00	73			75				NE to NNE	2 Cu	2 Nd & Ed	b c				
12:45	30.06	79	78	75	75				NE, NNE	4 Cu	6 Northward	b c				
13:00	30.12	75			75				NNE, variable	6 Cu	2 Nd & Ed	b c				
13:15	29.99	71			74				ENE	6 Cu	6 Nd & Ed	b c				
13:30								0								
13:45	29.89	76			75	65 200 63 400	14	650	NE by E	0		b c m				
14:00	29.88	77	71	75	75				NE by E	6 Cu	6	b c m				
14:15	29.90	75			75			1160	ENE, E by N	8 Cu	7 Eastward	b c				
14:30	29.90	74			75			0	E by N	6 Cu	6 Eastward	b c				
14:45	29.84	76			75	64 200 61 400		1120	E by N	4		b c				
15:00								0								
15:15	29.94	77	74	77	75				E by N	4 Cu	4 Eastward	b c				
15:30	29.92	76			76				E by N, NE	4 Cu	4 Eastward	b c				
15:45	29.90	75			77				NE	8	0	b c m				
16:00								2270								
16:15	29.94	73			78	64 200 57 400		0	NE by N	8		b c				
16:30	29.94	68	74	76	75				NE by N	8 Cu	8 Nd & Ed	b c				
16:45	29.91	75			77				NE	4 Cu	6 Nd & Ed	b c				
17:00	29.89	76			78			2650	ENE	8 Ci s, cu s	7 Nd & Wd	b c m				
17:15	29.82	83			78	60 200 50 400		0	ENE	2		b c m				
17:30	29.96	83		80	79			0	ENE	3 Cu s, ci cu	9 Eastward	b c m				
17:45	29.91	80			79				E to N by E	8 Cu	7 Nd & Ed	b c m				
18:00	29.93	77			79				NNE to ENE	8 Cu	4 Nd & Ed	b c				
18:15																
18:30	29.93	82	78	81	60				ENE, NE	2 Cu	4 Eastward	b c m				

Abstract log of the United States surveying brig Dolphin, Lieut.

Date	Latitude	Longitude	Surface currents.		Under currents.			Variation.
			From vessel	From boat				
					Direction	Direction.		
			Knots per hour	Knots per hour	Depth.	Knots per hour.		
1852 January.	North	West.					West	
10, 8 30 p. m.	5 36 30 \odot m.	19 34 46 \odot p. m.					17 45	
8 p. m.	5 32 42 " m.	19 34 16 " p. m.						
11, 4 a. m.	4 48 29 " m.	19 29 49 " a. m.						
8 a. m.	4 40 0 " m.	19 27 0 " a. m.					17 45	
noon.	4 32 40 \odot ..	19 24 24 \odot ..	S. 14° W. 0.5					
4 p. m.	4 27 0 " m.	19 21 15 " p. m.						
8 p. m.	4 25 6 " m.	19 20 15 " p. m.						
12, 4 a. m.	4 7 32 " m.	19 18 52 " a. m.						
noon.	4 5 20 " m.	19 12 4 " a. m.	S. 14° W. 0.6					
3 30 p. m.	4 5 10 " m.	19 15 28 " a. m.		S. $\frac{1}{2}$ W. 0.6	50 SE	0.6		
8 p. m.	4 6 26 " m.	19 15 10 " a. m.						
13, 4 a. m.	4 8 10 D. R.	19 18 8 D. R.						
noon.	4 14 34 D. R.	19 19 34 D. R.						
1 p. m.	4 14 21 D. R.	19 20 27 D. R.		SW. by W. 0.6		40 South 80 SSE	0.6 1.0	
6 p. m.	4 12 10 D. R.	19 20 13 D. R.						
14, 4 a. m.	3 50 32 * a. m.	19 12 42 * a. m.						
noon.	3 45 0 \odot ..	19 7 16 \odot ..						
4 p. m.	3 42 18 " m.	19 6 0 " p. m.		None		40 E. by S 80 E. $\frac{1}{4}$ S.	0.5 0.7	
8 p. m.	3 41 17 " m.	19 5 0 * p. m.						
15, 4 a. m.	3 51 29 " a. m.	19 6 12 \odot a. m.						
9 a. m.	3 51 0 " m.	19 6 0 " a. m.		E. by N. 0.3		10 East. 40 East.	0.2 0.5	
noon.	3 51 11 " .	19 4 58 \odot ..	N. 10° E 0.2				18 15	
4.45 p. m.	3 49 0 " m.	19 3 0 " p. m.					18 41	
8 p. m.	3 45 15 \odot m.	19 2 3 \odot p. m.						
16, 4 a. m.	3 31 38 D a. m.	18 40 30 * a. m.						
8 $\frac{1}{2}$ a. m.	3 19 0 " m.	18 37 0 " m.					18 42	
noon.	3 12 33 \odot ..	18 35 0 \odot a. m.	N 65° E. 0.8					
4.45 p. m.	3 8 0 " m.	18 49 39 " a. m.						
8 p. m.	3 2 33 " m.	18 50 15 " a. m.						
17, 4 a. m.	3 1 40 " m.	18 37 19 \odot a. m.						
8.30 a. m.	3 1 26 " m.	18 36 26 " a. m.		E. $\frac{1}{2}$ N. 0.5		10 E. by N. 40 East 80 East.	1.4 1.2 1.1	
noon.	3 1 33 " ..	18 35 18 \odot ..	N 87° E. 0.7					
2.30 p. m.	3 1 34 " m.	18 34 4 " p. m.					19 0	
8 p. m.	3 0 26 " m.	18 33 40 " p. m.						
18, 4 a. m.	3 0 8 " m.	18 42 34 " a. m.						
noon.	2 42 30 \odot ..	19 7 21 \odot ..	N 32° W 0.2					
4 30 p. m.	2 36 0 " m.	19 22 0 " p. m.		W. by S. 0.3			17 38	
8 p. m.	2 33 33 " m.	19 27 12 " p. m.						
19, 4 a. m.	2 20 11 * a. m.	19 51 1 * a. m.						
8 a. m.	2 12 0 " m.	20 7 0 " m.					16 45	

Phillips Lee, United States navy, commander—Continued.

Date.	Temp. air.		Temp. water.		Transparency fathoms.	Deep sea soundings.	Winds	Clouds.	Force of vapor, and relative humidity.							
	Barometer.		Under surface.						Direction per compass.	Class.	Portion.	Direction from.	Weather.	Hour.	Force of vapor.	Humidity.
	6 a. m.	2 p. m.	Surface.	Temperature. Depth.												
2.10.20			80	70 200 80 400		0	NE.	1		b c.	1 p. m.	31.07	71			
2.11.79			79			2019	NE., ENE NE. to N	1 Cu. 2 Ci cu, cu s	3 Sd & Ed 5 Sd. & Wd	b c b c m l	8 a. m.	21.09	77			
2.12.20	78	80	79			0	North	2 Cu	2 Eastward	b c.						
2.13.20			81	66 200 69 200	14	25-40	N. by W	1		b c m	3 p. m.	30.40	65			
2.17.20			79			2125	N by E., N by W	1 Cu	3 Northward	b c m						
2.18.79			79				N., NNW	2 Cu S, N	6 Sd & Wd	b c l	8 a. m.	22.93	92			
2.19.21	75	80	80			0	N., NNE	1 Ci cu, cu s	8 Sd. & Wd.	b c m						
2.20.22			81	64 200 80 400	17	2125	NNE	1		b c	2 p. m.	22.08	74			
2.20.21			80				NNE., NNW.	1 Ci cu.	8 Sd & Wd Nd	b c						
2.20.77			79				Variable	1 Cu S, N	10 Southward	o r.	8 a. m.	16.96	79			
2.22.75	76	79	77			2670	Variable	1 Cu S, N	10 Northward	o r.						
2.23.77			78	67 200 69 400	17	0	Variable	1		o r.						
2.24.75			78				Variable	1 Cu S, N	10 Sd. & Wd.	o p.						
2.24.75			79				SSW	1 Cu	5 Sd & Wd.	b c	8 a. m.	21.84	80			
2.25.20	77	81	80			2700	SSW, SW	1 Cu, ci cu	6 Sd & Wd	b c.						
2.26.21			79	70 200 69 400	16	0	Calm			b c.	2 p. m.	20.46	65			
2.26.79			79				Calm	Cu, cu s	5 Sd. & Wd	b c						
2.27.77			79			2763	Calm	Cu, cu s	5 Sd. & Wd	b c m l	8 a. m.	21.09	77			
2.28.21			79			22	Calm			b c						
2.28.27	78	82	80			0	Calm	Cu.	8 Westward	b c	2 p. m.	20.76	67			
2.29.20			79				Nd & Wd Sd & Wd	1 Cu	5 Nd & Wd Sd & Wd	b c						
2.29.75			79				SW to WSW	2 Cu	8 Sd & Wd	b c m l	8 a. m.	21.39	80			
2.29.81	79	81	80			0	W by S WSW	2 Cu N	6 Sd & Wd	b c						
2.29.76			80	49 200 56 400	18	400	Variable			b c q r	2 p. m.	21.36	86			
2.29.77			80				Variable	1 N, cu s	10 Sd & Wd	b c q r						
2.30.77			79			2725	Calm	Cu s	10 Sd & Wd	o.						
2.30.72			80	65 200, 24 73 400, 24 b		0	NE			b c	6 a. m.	22.98	92			
2.30.20	79	83	80	67 1000		0	Variable	1 Cu	8 Sd & Wd	b c.						
2.30.23			81				Calm			b c	2 p. m.	21.47	68			
2.30.21			81				Calm	Cu	5 Sd & Wd	b c						
2.31.77			80				SSE.	1 Cu s	4 Sd. & Ed	b c l	8 a. m.	20.82	74			
2.32.24	79	82	80			2781	SE	2 Cu	4 Sd & Ed	b c						
2.33.20			81	66 200 84 400		0	SSE.	2		b c	2 p. m.	20.73	74			
2.34.20			80				SE SSE	2 Cu	5 Southward	b c						
2.34.79			79				S by E	2 Cu s	3 Southward	b c l						

Abstract log of the United States surveying brig Dolphin, Lieut.

Date.	Latitude.	Longitude.	Surface currents.				Under currents.			Vari- ation.
			From vessel.		From boat.		Depth.	Direction.	Knots per hour.	
			Direction.	Knots per hour.	Direction.	Knots per hour.				
1852. January.	North. " "	West. " "								West.
19, 10 a. m....	2 10 10 ⊙ m...	19 57 25 ⊙ a. m.			NW.....	0.5	10 NW..	0.8		
noon.....	2 15 20 "	20 11 12 ⊙ — a. m.	N. 66° W.	0.7						
8 p. m....	1 50 38 " m...	20 18 46 " p. m.								
20, 4 a. m....	1 34 7 " m...	20 51 30 " a. m.								
8 a. m....	1 8 0	21 5 0								16 18 ⊙
noon.....	0 39 54 "	21 28 38 ⊙ — a. m.	N. 73° W.	1.7						
2.40 p. m..	0 28 54 " m...	21 45 0 " p. m.								17 11 ⊙
8 p. m....	0 21 16 " m...	21 48 17 * p. m.								
	South.									
21, 4 a. m. ...	0 5 2 ⊙ m...	22 25 36 ⊙ a. m.								
7.45 a. m..	0 23 0	22 34 0								16 10 ⊙
9 a. m....	0 34 30 ⊙ m...	22 40 18 ⊙ a. m.								
noon.....	0 34 2 "	22 47 51 ⊙ — a. m.	N. 79° W.	1.8						
5 p. m....	0 58 0	22 59 0								16 30 ⊙
8 p. m....	1 14 2 ⊙ m...	23 0 46 * p. m.								
22, 4 a. m....	2 0 42 " m...	23 20 15 " a. m.								
9 a. m....	2 27 39 " m...	23 37 58 ⊙ a. m.			W. by N..	0.6	40 S. by W...	0.5		
noon.....	2 27 42 "	23 40 46 ⊙ — a. m.	S. 81° W..	1.4						
4.30 p. m..	2 44 0	23 56 0								14 18 ⊙
8 p. m....	2 57 24 ⊙ m...	24 0 17 " p. m.								
23, 4 a. m....	3 39 46 " m...	24 35 51 " a. m.								
9.30 a. m..	4 6 18 " m...	24 46 45 " a. m.								
noon.....	4 6 28 ⊙ . . .	24 52 12 ⊙ — a. m.	S. 73° W..	1.7						
5 p. m....	4 27 0	25 8 0								13 50 ⊙
8 p. m....	4 42 40 ⊙ m...	25 18 40 * p. m.								
24, 4 a. m....	5 19 55 * a. m.	25 30 43 ⊙ a. m.								
9.30 a. m..	5 42 0 ⊙ m...	25 40 30 " a. m.			E. by S.?	0.2	80 East?.....	0.5	11 18 ⊙	
noon.....	5 42 16 "	25 46 24 ⊙ — a. m.	S. 72° W..	0.5						
5 p. m....	6 2 0	25 48 0								12 53 ⊙
8 p. m....	6 17 38 ⊙ m...	25 48 46 p. m.								
25, 4 a. m....	6 53 0 * a. m.	25 47 12 ⊙ a. m.								13 13 ⊙
9.30 a. m..	6 59 42 ⊙ m...	25 42 54 " a. m.			E. by S.?	0.3				
noon.....	7 0 3 "	25 43 44 " a. m.	S. 87° W..	0.4						
5 p. m....	6 39 0	25 32 0								14 13 ⊙
8 p. m....	6 21 9 * p. m.	25 23 0 p. m.								
26, 4 a. m....	5 49 42 " a. m.	25 5 49 ⊙ a. m.								
7½ a. m...	5 33 0	24 54 0								14 9 ⊙
noon.....	5 10 26 ⊙	24 40 52 ⊙ — a. m.	N. 88° W.	0.7						
4½ p. m...	4 52 0	24 23 0								14 51 ⊙
8 p. m....	4 42 45 ⊙ m...	24 13 8 ⊙ p. m.								
27, 4 a. m....	4 19 21 * a. m.	24 5 25 " a. m.								14 21 ⊙

Samuel Phillips Lee, United States navy, commander—Continued.

Bar- ometer.	Temp., air.		Temp., water.		Transparency fathoms.	Deep sea soundings.	Winds.		Clouds.		Weather.	Force of vapor, and relative humidity.		
	Mast- head.		Under surface.				Direction per compass.	Force.	Class.	Portion.		Direction from	Hour.	Force of vapor.	Humidity.
	Deck.	G & m.	2 p m.	Surface.							Temperature.					Depth.
20 14 50				80	67 64	200 400	SE. by E	3			b c m	8 a. m.	21.00	77
20 15 02	79	82		80			S. by E., SE by E	3 Cu	5 Southward		b c m			
20 15 19				90			SE. by E. to SE. by S	3 Cu	5 Sd & Ed		b c m	2 p. m.	21.08	77
20 15 34				79			SE. by S	3 Cu S, N	9 Sd & Ed		b c p q	2 a. m.	21.08	77
20 15 40	79	81		80			SE. by S., SSE	5 Cu S, cl.	6 Sd. & Ed		b c			
20 16 21				79	74 74	200 400	SE. by S	4			b c	4 p. m.	21.34	80
20 16 39				80			SSE., SE. by S	4 Cu S	8 Sd & Ed		b c			
20 16 55				79			SE. by S	4 Cu, cu S	5 Sd & Ed		b c			
20 17 31				79	70 69	200 400	SSE.	4			b c	9 a. m.	21.08	77
20 17 50	79	81		79			SSE.	4 Cu	7 Sd & Ed		b c			
20 18 04				78			SE., SE. by S.	5 Cl, cu S	5 Sd & Ed		b c	4 p. m.	21.34	80
20 18 17				78			SE. by S., SE.	4 Cu	4 Sd & Ed		b c			
20 18 33				79	78 71	200 400	SE	4			b c	9 a. m.	20.73	74
20 18 55	79	81		79			SE	4 Cu S, cl S	6 Sd & Ed		b c			
20 19 19				79			SE. by S	4 Cu S, cl S	8 Sd. & Ed		b c	4 p. m.	20.78	74
20 19 39				79			SE.	4 Cu S	5 Sd & Ed		b c m			
20 19 50				78	66 68	200 400	SE.	4			b c	9 a. m.	21.59	84
20 20 08	79	80		79			SE. by S., SE.	4 Cu, cu S	8 Sd & Ed		b c			
20 20 19				78			SSE., SE. by S.	4 Cu S, cl S	8 Sd & Ed		b c	4 p. m.	20.58	77
20 20 35				78			SE.	4 Cu S	7 Sd. & Ed		b c			
20 20 51				79	69 61	200 400	SE. by S.	4			b c	9 a. m.	21.40	80
20 21 03	78	82		78			SE. by S	4 Cu S	6 Sd. & Ed		b c			
20 21 19				79			SE., SE. by S.	8 Cl, cu S	7 Sd & Ed		b c	4 p. m.	20.97	77
20 21 35				78			ESE., E. by S.	3 Cu S	5 Sd & Ed		b c			
20 21 50				78	65 59	200 400	ESE.	8			b c	9 a. m.	20.08	74
20 22 02	79	80		78			SE. by E	3 Cu S, cl	5 Sd & Ed		b c	4 p. m.	20.03	74
20 22 19				78			ESE., SE. by E.	4 Cu, cl cu	7 Sd. & Ed		b c			
20 22 37				78			SE. by E.	4 Cu S	5 Sd & Ed		b c	9 a. m.	20.72	74
20 22 50	77	82		79			SE. by E.	4 Cu S	5 Sd. & Ed		b c			
20 23 04				79			SE.	5 Cu S	5 Sd. & Ed		b c m			
20 23 19				79			SE. by E.	4 N, cu S	6 Sd. & Ed		b c q r			

Abstract log of the United States surveying brig Dolphin, Lieut

Date.	Latitude	Longitude	Surface current.				Vari- tion.
			From vessel.		Under currents.		
			Direction	Knots per hour.	Direction.	Knots per hour.	
1852 January.	South	West					West.
27, 9 30 a. m.	4 11 34 m	24 0 41 C a. m.					
noon	4 12 22 "	24 4 58 C — N 43° W 1 0					
4½ p. m.	4 31 0	24 7 0					14 29 C
8 p. m.	4 35 15 " m	24 8 0 C p. m.					
28, 4 a. m.	5 10 34 " a. m.	24 19 21 " a. m.					
7½ a. m.	4 55 0	24 2 0					14 13 C
noon	4 37 0	24 40 15 " — S 87° W 1 0					
4½ p. m.	4 19 0	23 33 0					15 32 C
8 p. m.	4 8 51 " m	23 21 0 " p. m.					
29, 4 a. m.	3 43 58 " a. m.	23 3 21 C a. m.					
9.30 a. m.	3 33 24 C m.	23 33 27 " a. m.					15 34 C
noon.	3 32 30 "	22 49 49 — N 63° W 1 0					
5 p. m.	3 23 0	22 24 0					15 30 C
8 p. m.	3 17 17 p. m.	22 4 33 " p. m.					
30, 4 a. m.	3 2 22 " a. m.	21 44 5 C a. m.					
7½ a. m.	2 56 0	21 22 0					16 4 C
noon	2 52 12 C	21 0 25 " — N 68° W 1 0 8					
3 30 p. m.	2 47 0 " m	20 51 0 " p. m.					17 23 C
8 p. m.	2 41 5 " m	20 43 46 " p. m.					
31, 4 a. m.	2 25 27 " m	20 49 21 C a. m.					
7 a. m.	2 26 8 " m	20 47 36 " a. m.	WNW	0 8	40 WNW 50 W by N.	0 7 0 7	
noon	2 23 53 "	20 46 26 " — N 57° W 0 7					
8 p. m.	2 18 4 " m	20 37 51 " p. m.					17 13 C
February							
1, 4 a. m.	2 6 58 " m	20 39 0 " a. m.					
noon	1 59 40 "	20 31 51 C — N. 50° W 0 6					
8 p. m.	1 40 59 " m	20 0 16 " p. m.					
2, 4 a. m.	1 21 21 D. R.	19 53 52 C a. m.					
9.30 a. m.	1 9 30 D. R.	19 25 42 " a. m.					17 26 C
noon.	1 7 8 D. R.	19 23 8 " a. m.	N. 41° W 0 5				
6 p. m.	1 2 0	19 14 0					18 22 C
8 p. m.	0 55 55 D. R.	19 10 18 C a. m.					
North							
3, 4 a. m.	0 0 22 " a. m.	18 53 29 " a. m.					
noon.	0 14 5 C	18 40 36 C — N 41° W 0 8					17 7 C
0.30 p. m.	0 14 5 " m	18 40 36 C					
8 p. m.	0 19 10 " m	18 42 21 " p. m.					
4, 4 a. m.	0 36 35 " m	18 34 9 " a. m.					
7½ a. m.	0 36 0	18 32 0					18 50 C
noon.	0 22 40 C	18 43 36 C — N. 53° W 1.2					

Samuel Phillips Lee, United States navy, commander—Continued.

Baro- meter.	Temp., air.		Temp., water.		Transparency fathoms.	Deep sea soundings.	Winds.		Clouds.			Weather	Force of vapor, and relative humidity.		
	Mast- head.		Under surface.				Direction per compass.	Force.	Class.	Portion.	Direction from.		Hour.	Force of vapor.	Humidity.
	Deck.	6 a. m.	2 p. m.	Surface.												Temperature.	Depth.
29.915			79	{ 75 200 67 400 }		3200	SE. by E.	4				b c.	9 a. m.	22.00	81
29.907	75	81	79			0	SE. by E.	4	Cu	6	Sd. & Ed.	b c.			
29.901			79				SSE, SE by E.	4	Cl, cu s.	7	Sd. & Ed.	b c.	4 p. m.	20.97	77
29.920			78				SSE	4	Cu	4	Sd. & Ed.	b c.	9 a. m.	20.97	77
29.925	75	81	79				SE. by E.	5	Cu	4	Sd. & Ed.	b c.			
29.932			79				SE	4	Cu	6	Sd. & Ed.	b c m.	4 p. m.	21.34	74
29.940			75				SE. by S.	4	Cu s.	5	Sd. & Ed.	b c m.			
29.932			75	{ 70 200 64 400 }	15	3575	SSE	4				b c m.	9 a. m.	20.97	77
29.919	79	81	79			0	SE by S, SSE.	4	Cu, cu s.	5	Sd. & Ed.	b c m.	4 p. m.	21.69	77
29.901			79				SE by S, SSE.	4	Cu s.	6	Sd. & Ed.	b c.			
29.880			79				SSE	4	Cl cu, cu s.	6	Sd. & Ed.	b c.	9 a. m.	20.72	74
29.905	75	81	80				SSE	4	Cu s.	6	Sd. & Ed.	b c.			
29.909			80	{ 65 200 67 400 }	14	0	SE	3				b c m.	4 p. m.	20.41	70
29.902			75			2650	SE., SE by S.	3	Cu	6	Sd. & Ed.	b c m.			
29.902			79			8450	SSE	3	Cu s.	6	Sd. & Ed.	b c.			
29.901			79	{ 64 200 64 400 }	15	8450	SSE	3				b c m.	9 a. m.	23.32	89
29.907	79	81	79			0	SSE, S by W.	3	Cu s.	7	Sd. & Ed.	b c.			
29.902			79				SSE	2	Cu, cl s.	5	Sd. & Ed.	b c m.	4 p. m.	21.69	77
29.905			79				Calm		N, cu s.	6	Eastward.	b c p.			
29.908	79	82	80				SE	1	Cu s, N.	6	Sd. & Ed.	b c p.	9 a. m.	23.01	84
29.909			79				SE., SSE	3	Cu	7	Sd. & Ed.	b c.	4 p. m.	23.39	77
29.909			79				SE. to SSE	4	Cu, cu s, N	7	Sd. & Ed.	b c p.			
29.905			79	{ 60 200 72 400 }	15	0	SSE	3				b c.	9 a. m.	20.97	77
29.907	79	81	79			1960	SSE	3	Cu s.	5	Sd. & Ed.	b c m.	4 p. m.	23.01	84
29.901			77				SE	3	Cu s, N.	5	Sd. & Ed.	b c m— o p q			
29.900			77				SE	4	Cu s.	5	Sd. & Ed.	b c m.			
29.908	75		79				SE	4	Cu, cl s.	6	Sd. & Ed.	b c m.	9 a. m.	20.97	77
29.908			79	{ 60 200 69 400 17 1/2 78 400 }		0	SE	1				b c m.			
29.903			79			2000	SE., South.	1	Cl cu	6	Sd. & Ed.	b c m.	4 p. m.	21.34	74
29.901			79				S. by E.	1	Cu & cl	5	Sd. & Ed.	b c m.	9 a. m.	21.69	77
29.906	79	82	79				SSE	2	Cu s.	7	Sd. & Ed.	b c m.			

Abstract log of the United States surveying brig Dolphin, Lieut

Date.	Latitude.	Longitude.	Surface currents.				Under currents.		Vari- ation.	
			From vessel.		From boat.		Depth.	Direction		Knots per hour
			Direction.	Knots per hour	Direction.	Knots per hour.				
1851 February	North	West							Mag.	
4, 9 45 p. m.	0 15 55 \odot m.	18 51 0 \odot p. m.			NW	1.2			17 21 8	
8 p. m.	0 13 18 " m.	18 47 42 " p. m.								
5, 4 a. m.	0 29 33 " m.	18 45 31 " a. m.								
noon	0 45 56 "	18 32 22 " a. m.	N 67° W	1.8						
3 20 p. m.	0 45 1 " m.	18 25 49 " a. m.			NW. by W.	1.0				
8 p. m.	0 52 8 " m.	18 27 30 " a. m.								
6, 4 a. m.	0 55 25 " m.	18 17 25 " a. m.							18 21 8	
noon	0 59 43 "	18 8 55 \odot a. m.	N 67° W	1.8						
4½ p. m.	1 6 0	17 45 0							18 21 8	
8 p. m.	1 9 48 \odot m.	17 32 58 * p. m.								
7, 4 a. m.	1 31 42 * a. m.	17 4 59 \odot a. m.								
7½ a. m.	1 46 0	16 45 0							17 49 8	
noon	1 58 9 \odot	16 35 34 \odot a. m.	N 89° W	0.9						
4 p. m.	2 8 30 " m.	16 24 33 " p. m.							18 21 8	
8 p. m.	2 8 43 " m.	16 19 7 * p. m.								
8, 4 a. m.	2 11 23 " m.	16 12 24 \odot a. m.							18 11 8	
noon	2 7 4 "	16 13 19 \odot a. m.	N. 72° E	0.8						
4 20 p. m.	2 3 45 " m.	16 12 7 " p. m.								
8 p. m.	2 7 40 " m.	16 3 31 " p. m.								
9, 4 a. m.	2 14 46 " m.	15 45 0 \odot a. m.								
10 a. m.	2 17 24 " m.	15 45 0 \odot a. m.							18 24 8	
noon	2 17 59 "	15 43 57 \odot a. m.	NE.	0.5						
8 p. m.	2 16 16 " m.	15 41 46 " p. m.								
10, 4 a. m.	2 16 29 " m.	15 32 42 \odot a. m.							18 21 8	
noon	2 7 35 " \odot	15 17 17 \odot a. m.	N 85° E.	0.5						
8 p. m.	1 59 10 " m.	14 45 27 * p. m.								
11, 4 a. m.	1 53 43 " m.	14 59 13 \odot a. m.								
6 30 a. m.	1 56 43 " m.	14 53 12 \odot a. m.							18 16 8	
noon.	1 43 19 "	15 0 40 \odot a. m.	N 8° E.	0.6						
8 p. m.	1 41 5 " m.	15 23 24 " p. m.								
12, 4 a. m.	1 37 40 \odot a. m.	15 53 7 \odot a. m.								
7½ a. m.	1 14 0	16 4 0							17 25 8	
noon	0 55 8 \odot	16 21 56 \odot a. m.	N. 20° W.	0.7						
4½ p. m.	0 34 0	16 33 0							17 48 8	
8 p. m.	0 15 4 \odot m.	16 41 20 * p. m.								

Samuel Phillips Lee, United States navy, commander—Continued.

Day Month	Temp., air.		Temp., water.		Transparency fathoms.	Deep sea soundings.	Winds. Direction per compass	Clouds.		Weather	Force of vapor, and relative humidity.			
	Main- head.		Surface.	Under surface. Temperature Depth.				Class.	Portion.		Direction from.	Hour	Force of vapor.	Humidity.
	Deck	8 a. m. 3 p. m.												
13 24 5			80	{ 70 200 72 400 }	13	0	SE			b c	4 p. m.	22 75	51	
13 24 5			79			1900	SE	Cu S, N.	9 Ed. & Ed.	b c—op.				
13 24 5			79				SE., SE. by S.	3 Cu S, ci S	10 Ed. & Ed.	b c				
13 24 5	79	61	79				SE. by S., SE. by E.	3 Cu S, ci cu.	9 Ed. & Ed.	b c	9 a. m.	21 84	80	
13 25 4			80	{ 70 200 65 400 }	14	2680	SE			b c	4 p. m.	22.00	80	
13 25 4			79			0	SE. by E. to SSE.	2 Cu S	7 Ed. & Ed.	b c				
13 25 4			79				SE. by E. to SSW.	2 Cu S, N.	8 Ed. & Ed.	b c m p q				
13 26 4	77	61	80				Calm, SSE.	3 N, cu S	9 Ed. & Ed.	b c q r	9 a. m.	22.98	99	
13 26 4			80				SSE	4 Cu, cu S	4 Ed. & Ed.	b c	4 p. m.	23.00	80	
13 26 4			79				S. by E., SE. by E.	4 Cu S	6 Southward	b c	9 a. m.	21.69	77	
13 28 4	78	83	81				SE	4 Cu	5 Ed. & Ed.	b c m				
13 28 4			81	{ 64 50 67 100 65 200 68 400 }	17	0 400	SE			b c m	4 p. m.	21.69	77	
13 28 4			80				SE. by S., SE.	3 Cu	4 Ed. & Ed.	b c m				
13 28 4			80				SE. by E.	1 Cu	5 Ed. & Ed.	b c m				
13 28 4	79	85	81				SE. to SSE	1 Cu	6 Ed. & Wd.	b c m	9 a. m.	21 69	77	
13 29 0			82	{ 70 50 65 100 62 200 60 400 }	17	0 400	SSW	1		b c	4 p. m.	21.77	71	
13 29 4			81				S. to SSE	1 Cu S	6 Ed. & Ed.	b c				
13 30 2			79				S. by E.	1 Cu, cu S	5 Ed. & Ed.	b c m				
13 31 2			81	{ 66 50 64 100 62 200 }	18 1/2	0 900	Calm			b c m	9 a. m.	22.09	74	
13 30 0	81	85	83				Calm	Cu	5 Ed. & Ed.	b c m				
13 31 0			82				Calm	Cu	5 Ed. & Ed.	b c m	4 p. m.	21.47	69	
13 34 4			81				Calm	Cu	2 Eastward	b c m				
13 37 0	80	83	81				WSW., SSW.	1 Cu, ci	6 Ed. & Wd.	b c m	9 a. m.	21.69	77	
13 38 2			81				S. by W.	3 Cu	5 Southward	b c w r	4 p. m.	22.89	77	
13 38 2			79				S. by W.	3 Cu	5 Southward	b c m l.				
13 41 2			90	{ 64 200 58 400 }	12	0 400	SSW	3		b c m	9 a. m.	21.69	77	
13 43 2	79	80	82				S by W, SSW	2 Cu S	7 Ed. & Ed.	b c m				
13 44 4			81				SSW, S by W	2 Cu	7 Ed. & Wd.	b c m	4 p. m.	21 69	77	
13 51 2			80				S. by W to S. by E.	3 Cu	4 Southward	b c m l.				
13 55 0											9 a. m.	22 70	81	
13 55 0	80	81	81				S. by E, SSE.	4 Cu	4 Ed. & Ed.	b c w r	4 p. m.	21 69	77	
13 55 0			80				SSE., SE.	3 Cu	7 Ed. & Ed.	b c m				

Abstract log of the United States surveying brig Dolphin, Lieut

Date	Latitude	Longitude	Surface current.		Under currents.		Vari- tion.
			From vessel	From boat.			
			Direction.	Knots per hour	Direction	Knots per hour	
1851 February	South	West			Depth.		West.
13, 4 a. m.	0 16 39 Q	16 59 6 a. m.					
7 1/4 a. m.	0 20 0	17 4 0					16 14 Q
noon.	0 25 33 Q	17 30 5 Q	N 72° W	1.0			
3 p. m.	0 31 52 " m.	17 45 23 " p. m.					
8 p. m.	0 23 23 " m.	17 49 45 " p. m.					
14, 4 a. m.	0 45 47 Q a. m.	18 35 57 Q a. m.					
6.30 a. m.	0 43 35 " a. m.	18 45 15 " a. m.					16 54 Q
noon.	0 33 33 Q	19 1 43 Q	S. 49° W	0.5			
3 p. m.	0 22 10 " m.	19 6 51 " p. m.					
15, 4 a. m.	0 37 46 " a. m.	19 56 47 " a. m.					
noon.	0 37 46 " m.	19 56 18 " a. m.	S. 23° W.	0.5			
4 1/2 p. m.	0 33 0	19 0 0					16 3 Q
6 p. m.	0 23 0 " m.	19 9 40 " p. m.					
8 p. m.	0 25 46 " m.	19 12 57 " p. m.					
16, 4 a. m.	0 30 12 " a. m.	20 8 55 Q a. m.					
7 1/4 a. m.	0 29 0	20 25 0					17 10 Q
noon.	0 26 33	20 50 51 Q	S. 76° W	0.6			
3 p. m.	0 22 50 " m.	21 6 33 " p. m.					
8 p. m.	0 24 7 " m.	21 18 27 " p. m.					
17, 4 a. m.	0 18 54 " a. m.	22 6 55 Q a. m.					
7 1/4 a. m.	0 25 0	22 22 0					17 8 Q
noon.	0 25 7 Q	22 26 42 Q	N 75° W	1.0			
6 p. m.	0 42 0 " m.	22 47 0 " p. m.					
8 p. m.	0 50 20 " m.	22 51 54 " p. m.					17 8 Q
18, 4 a. m.	0 52 30 " a. m.	22 59 38 Q a. m.					
7 1/4 a. m.	0 56 0	23 8 0					16 0 Q
9.45 a. m.	1 2 13 Q m.	23 17 45 Q a. m.					
noon.	1 1 23 " m.	23 17 50 Q	N 57° W	0.9			
2 p. m.	0 57 0 " m.	23 19 54 " p. m.					
8 p. m.	0 57 11 " m.	23 27 6 " p. m.					
19, 4 a. m.	1 14 30 " a. m.	24 0 11 " a. m.					
7 1/4 a. m.	1 20 0	24 21 0					14 57 Q

Phillips Lee, United States navy, commander—Continued.

Date.	Temp. air.		Temp., water.			Transparency fathoms	Deep sea soundings	Winds.		Clouds		Force of vapor, and relative humidity.					
	Bar.		Surface.	Under surface.				Direction per compass.	Force	Class.	Portion	Direction from.	Weather	Hour.	Force of vapor.	Humidity	
	Pack.	Sea.		Temperature	Depth												
23.7.98			61					SE.	3	Cu	3	Ed. & Ed	b c m.	9 a. m.	20.97	77	
23.8.98	79	60	79	50	17	28-40	SE	3	Cu	6	Ed. & Ed	b c m.					
23.9.98			79	200		0	SE	3				b c	4 p. m.	22.39	77		
23.10.98			79	400			SE	3	Cu S, N	6	Ed. & Ed	b c p.					
23.11.98			60			0	SE, SE by S.	3	Cu, N	7	Ed. & Ed	b c m.					
23.12.98			78	50	1000		SSE.	3			b c m.	9 a. m.	22.31	84			
23.13.98	79	82	80	100			SSE, S by E.	3	Cu	6	Ed. & Ed	b c m.					
23.14.98			78				SW. by S.	3	Cu S, N	8	Ed. & Ed	b c m p.	4 p. m.	22.56	96		
23.15.98			79				WNW				Westward						
23.16.98			79				Variable	1	N, cu S	9	Eastward	om t. r.					
23.17.98	79		79	50	0		N to NE by N	2	N	9	Eastward	o r.	9 a. m.	21.68	96		
23.18.98			79	100													
23.19.98			79	200				South	3			b c.					
23.20.98			79	400		1500	South	3	Cl cu.	6	Eastward	b c					
23.21.98			79				South	3	Cu	4	Southward	b c m.	9 a. m.	22.00	81		
23.22.98	79	68	79				S, SSE	3	Cu	5	Southward	b c					
23.23.98				10	11												
23.24.98				50													
23.25.98				100													
23.26.98				200			0	SE.	3			b c m.	4 p. m.	22.60	77		
23.27.98				400			1900										
23.28.98				10													
23.29.98				50													
23.30.98				100													
23.31.98				200													
23.32.98				400													
23.33.98			79				SE, South	3	Cu	6	Ed. & Ed	b c m.					
23.34.98			79				South	3	Cu S, N	6	Ed. & Ed	b c m.	9 a. m.	22.31	84		
23.35.98	79	81	78				South	2	Cu	6	Ed. & Ed	b c m.					
23.36.98			79										4 p. m.	22.00	81		
23.37.98			79				SSE.	4	Cu	6	Ed. & Ed	b c m.					
23.38.98			78				S. by E	4	Cu S, N	4	Southward	b c m p.					
23.39.98				10	0												
23.40.98			79	50			SSE.	3				b c m.	9 a. m.	22.00	81		
23.41.98			79	100			1500										
23.42.98			79	200				S. by E. to SE	3	Cu	4	Southward	b c m.				
23.43.98	79		79	400		0											
23.44.98			61		16		SE	2			b c m.	4 p. m.	22.09	74			
23.45.98			79			1100	SE, S. by E.	2	Cu	5	Southward	b c m.					
23.46.98			79				S. S. by E.	3	Cu S.	3	Southward	b c m.					
23.47.98													9 a. m.	20.97	77		

Abstract log of the United States surveying brig Dolphin, Lieut

Date	Latitude.	Longitude.	Surface currents.		Under currents.		Vari- tion.
			From vessel.	From boat.			
			Direction.	Knots per hour.	Direction.	Knots per hour.	
1879. February.	South	West.					West.
19, noon	1 42 16 "	24 33 41 "	a. m. N 76° W	0.6			
			p. m.				
4 p. m.	1 50 30 " "	24 52 6 "	p. m.		West. 1.3	10 West. 80 West.	1.6 1.5
							14 14 @
8 p. m.	1 48 36 " "	24 53 57 "	p. m.				
20, 4 a. m.	2 9 15 " a. m.	25 53 25 " a. m.					
7½ a. m.	2 20 0 "	26 10 0 "					14 17 @
noon.	2 37 22 @	26 47 42 @	a. m. N 88° W	1.9			
			p. m.				
4.30 p. m.	2 46 0 " "	27 19 0 " "	p. m.				15 35 @
8 p. m.	2 51 30 " "	27 34 15 " "	p. m.				
21, 4 a. m.	3 6 0 " a. m.	28 37 25 " a. m.					
7½ a. m.	3 12 0 "	28 55 0 "					19 26 @
10 a. m.	3 15 0 @ "	29 3 34 @ a. m.			West 1.3	10 West. 80 W. by S.	1.3 1.3
			a. m.				
noon	3 14 27 "	29 2 16 @	N 81° W	1.5			
			p. m.				
4 p. m.	3 22 0 "	29 25 0 "					19 38 @
8 p. m.	3 43 18 " p. m.	29 44 1 " p. m.					
22, 4 a. m.	3 32 56 " a. m.	30 36 30 " a. m.					
7½ a. m.	3 40 0 "	30 58 0 "					13 13 @
noon	3 45 18 @	31 23 8 @	a. m. N 77° W	1.6			
			p. m.				
2 30 p. m.	3 47 54 " "	31 45 24 @ * *			NW by W. 1.2	10 NW by W. 80 NNW	1.3 0.9
			p. m.				
8 p. m.	3 48 42 " p. m.	31 44 20 " p. m.					12 17 @
23, 4 a. m.	3 33 14 " "	31 43 12 @ a. m.					
			a. m.				
noon.	3 35 44 "	31 45 5 @	N 70° W	1.2			
			p. m.				
8 p. m.	3 47 36 " "	32 7 3 " "	p. m.				
24, 4 a. m.							
noon							
8 p. m.							
25, 4 a. m.							
noon							
8 p. m.							
26, 4 a. m.							
noon							
8 p. m.							
27, 4 a. m.							
noon							
8 p. m.	5 53 56 D. R.	32 33 32 " p. m.					
28, 4 a. m.	4 15 30 " "	32 45 21 D. R.					
noon	4 30 25 " "	32 36 50 " "	S. 72° W	0.7			
3 30 p. m.	4 35 22 " "	32 48 35 " "			W. by N 1.2	10 W by N 80 W by N	1.3 1.0
8 p. m.	4 42 48 D. R.	32 46 5 D. R.					
29, 4 a. m.	5 24 9 @ "	32 41 57 @ a. m.					
5.30 a. m.	5 32 1 " "	32 43 52 " "	a. m.		South 0.2		
			a. m.				
noon	5 54 40 " "	32 55 39 @	S. 72° W	0.7			
			p. m.				
4½ p. m.	6 23 0 "	33 8 0 "					13 20 @
8 p. m.	6 45 56 @ "	33 15 0 " p. m.					

d Phillips Lee, United States navy, commander—Continued.

Time.		Temp., water.		Transparency fathoms.	Deep sea soundings.	Winds.		Clouds.			Weather.	Force of vapor, and relative humidity.		
Lat.	Long.	Surface.	Under surface.			Direction per compass.	Force.	Class.	Portion.	Direction from.		Hour.	Force of vapor.	Humidity.
79	81	79	79			E. by E., SSE.	3	Cu, cl S.	5	Southward	b c m			
			79	10	0	SSE.	3			b c m	4 p. m.	20.73	74	
			79	50	1100	SSE, SE by S	3	Cu, cu S	4	Southward	b c			
			79	100		SSE.	3	Cu, cu S	4	Ed. & Ed.	b c m.	9 a. m.	20.73	74
			79	200										
			79	400										
79	81	80				SSE.	3	Cu	4	Ed. & Ed.	b c m			
			79	50		S. by E.	3				4 p. m.	20.97	77	
			79	100		S. by E.	3	Cu	5	Ed. & Ed.	b c m.			
			79			S. by E.	3	Cu	4	Southward	b c m.			
			79											
			79	50	0	S. by E.	3			b c	9 a. m.	20.73	74	
			79	100	1100	S. by E.	3	Cu	4	Southward	b c			
			79								4 p. m.	20.73	74	
			79			SSE.	3	Cu	5	Ed. & Ed.	b c m.			
			79			SSE.	3	Cu, cu S	2	Ed. & Ed.	b c m.	9 a. m.	20.73	74
79	81	80				South	3	Cu S, cl cu	7	Ed. & Ed.	b c m			
			79	10	0	SE. by E.	2			b c m	4 p. m.	20.73	74	
			79	50	700	SE. by E., SSE	3	Cu, cu S	9	Ed. & Ed.	b c m.			
			79	100		SSE, var	2	Cu S, N	6	Ed. & Ed.	b c m— or l			
77	81	79				Variable.	1	N	10	Ed. & Ed.	o q r l t.	9 a. m.	22.27	93
			79			SSE, SE by S.	2	Cu	7	Ed. & Wd	b c m	4 p. m.		77
			79			SE., SSE	2	Cu S	6	Ed. & Ed.	b c m			
79	82	80				SSE.	2	Cu, cu S	7	Ed. & Ed.	b c	9 a. m.	20.97	77
			79			SE.	3	Cu	4	Ed. & Ed.	b c	4 p. m.	23.09	74
			79			SE.	3	Cu, cu S	4	Ed. & Ed.	b c m.			
79	82	81				SE.	3	Cu	3	Ed. & Ed.	b c	9 a. m.	10.77	70
			81			SE., ENE.	3	Cu	5	Ed. & Ed.	b c	4 p. m.	23.09	74
			79			E. by N to E. by S.	1	Cu	3	Ed. & Ed.	b c m			
			79			NE. by E. to SE.	1	Cu	4	Ed. & Ed.	b c m.			
			79			SSE, SE by E.	3	N	9	Ed. & Ed.	o r	4 p. m.	23.78	100
			79			SE.	3	Cu, cu S	3	Ed. & Ed.	b c m			
79	82	80				SE, E. by S.	3	Cu	7	Ed. & Ed.	b c	9 a. m.	20.73	74
			80			SSE to SSE	1	Cu S, N	6	Ed. & Ed.	b c m q l	4 p. m.	23.09	75
			79			E., E. by S.	3	N	9	Ed. & Ed.	b c q-ro			
			79						Westward.					
79	79	79				E. by N.	2	N	10	Eastward.	o r	9 a. m.	22.55	96
			79	50	0	SSW	1							
			79	100	1100	SW. by S, Ed. & Ed.	2	Cu S	10	Ed. & Ed.	o			
			79			SE. by S. to SE. by E.	4	Cu S, cu	6	Ed. & Ed.	b c m.			
			79	50	2490	SE	2			b c				
			79	100	0									
81	79	80				SE	4	Cu S	7	Ed. & Ed.	b c	9 a. m.	21.84	80
			80			SE. by E.	3	Cu S, cu S	6	Ed. & Ed.	b c m.			

Samuel Phillips Lee, United States navy, commander—Continued.

Day. Hour.	Temp., air.		Temp., water.		Transparency in fathoms.	Deep-sea soundings.	Winds.		Clouds.		Weather.	Force of vapor, and relative humidity.			
	Mast-head.		Under surface.				Direction per compass.	Force.	Class.	Portion.		Direction from.	Hour.	Force of vapor.	Humidity.
	Drunk.	At 6 a. m.	At 6 p. m.	Surface.												Temperature.	Depth.
18.0208				80	{ 77 80 71 300 71 400 }	0	SE. by E., ESE.	4	Cu S	7	Ed. & Ed.	b c l.			
18.0209				80		1100	E. by S.	4				b c			
18.0210	61	63	90			43	E. by S., SE.	4	Cu S.	8	Ed. & Ed.	b c	9 a. m.	31.80	74
18.0211				81	{ 80 10 80 30 77 40 }	0	SE. by S.	4			b c	4 p. m.	30.41	70	
18.0212				81			SE. by S. to ESE.	4	Cu S.	7	Ed. & Ed.	b c m			
18.0213				80			ESE., SE. by E.	4	Cu S	5	Ed. & Ed.	b c m			
18.0214	61	63	81				SE. by E.	4	Cu, cu S	7	Ed. & Ed.	b c m	9 a. m.	31.80	77
18.0215				80			ESE.	4	Cu, cu S	5	Ed. & Ed.	b c m	4 p. m.	31.80	74
18.0216	73	84	81				ESE., SE.	4	Cu S, N	5	Ed. & Ed.	b c m r			
18.0217				78			SE., ESE.	3	Cu S, cu	7	Ed. & Ed.	b c m	9 a. m.	31.80	77
18.0218				84			SE., ESE.	3	Cu S, cu	6	Ed. & Ed.	b c m	4 p. m.	31.80	77
18.0219				81			ESE.	3	Cu, cu S	7	Ed. & Ed.	b c m			
18.0220	73			81			ESE., SE.	3	Cu S, cu	7	Ed. & Ed.	b c m	9 a. m.	31.80	77
18.0221				81			SE.	3	Cu	5	Ed. & Ed.	b c m	4 p. m.	33.88	78
18.0222				82			SE.	3	Cu, cu S	6	Ed. & Ed.	b c m			
18.0223	73	84	81				SE.	3	Cu	7	Ed. & Ed.	b c	9 a. m.	31.80	77
18.0224				82			ESE.	4	Cu S, cu	6	Ed. & Ed.	b c m	4 p. m.	30.48	65
18.0225				81			SE. by S	4	Cu S	7	Ed. & Ed.	b c m			
18.0226	73	84	81				Ed. & Ed., Ed. & Wd.	3	Cu S, N.	8	Ed. & Ed.	b c q r	9 a. m.	34.76	86
18.0227				83			SE.	3	Cu S.	8	Ed. & Ed.	b c m	4 p. m.	30.72	74

Abstract log of the United States surveying brig Dolphin, Lieut. Sumner Pardee,

Date.	Latitude	Longitude	Surface current.		Under currents.		Vari- tion.	
			From vessel.		From boat.			
			Direction.	Knots per hour.	Direction.	Knots per hour.		
	South.	West			Depth.	Direction.	Knots per hour.	
1852 March,	°	°						West
7, 4 a. m.								
noon								
8 p. m.	8 6 21 D R	84 49 41 D R						
8, 4 a. m.	7 41 44 * a. m.	84 87 20 a. m.						
6.30 a. m.	7 40 21 " a. m.	84 83 15 " a. m.						1 0
noon	7 14 4 " a. m.	84 16 45 " a. m.	N. 55° W.	0.6				
4 p. m.	7 0 0 " a. m.	83 48 0 " a. m.						57 6
8 p. m.	6 50 40 * a. m.	83 84 20 a. m.						
9, 4 a. m.	6 18 38 " a. m.	83 80 6 " a. m.						
5.40 a. m.	6 15 26 " a. m.	83 24 10 " a. m.		NW. by N.	0.8	10 NW. by N. 0.5 80 NW. by N. 0.6		
noon	6 7 10 a. m.	83 16 46 a. m.	N. 55° W.	0.6				
8 p. m.	5 31 45 " a. m.	83 48 41 " a. m.						
10, 4 a. m.	4 56 37 * a. m.	82 30 39 a. m.						
7 1/4 a. m.	4 43 0 " a. m.	82 26 0 " a. m.						11 19 6
noon	4 35 12 a. m.	82 23 5 a. m.	West.	0.9				
8 p. m.	4 43 33 " a. m.	82 42 54 " a. m.		West	1.1	10 SW. by W. 1.0 80 West 1.4		10 26 6
8 p. m.	4 43 9 " a. m.	82 53 45 " a. m.						
11, 4 a. m.	4 15 30 " a. m.	82 45 18 a. m.						
8 a. m.	4 9 0 " a. m.	82 34 0 " a. m.						10 33 6
noon	3 56 42 a. m.	82 19 1 a. m.	West.	1.2				
8 p. m.								
12, 4 a. m.								
noon								
8 p. m.								
13, 4 a. m.								
noon	3 51 41 a. m.	82 2 14 * a. m.		NW	0.5	10 WNW 0.8 80 NW. by N. 1.0		
8 p. m.	3 42 41 * a. m.	82 16 3 * a. m.						
14, 4 a. m.	3 17 4 " a. m.	82 16 29 a. m.						
noon	3 35 46 a. m.	82 26 44 a. m.		N. 60° W	1.0			
8 p. m.								
15, 4 a. m.								
noon	3 50 18 a. m.	82 50 40 a. m.						10 34 6
8 p. m.								
16, 4 a. m.								
noon	3 50 18 a. m.	82 50 40 a. m.						
8 p. m.								
17, 4 a. m.								
noon	3 58 6 D. R.	82 52 7 D. R.						
8 p. m.	3 45 9 " a. m.	82 40 47 " a. m.						
18, 4 a. m.	3 26 17 a. m.	82 54 49 a. m.						
noon	3 51 22 " a. m.	82 56 56 a. m.		S. 85° W.	1.5			

Phillips Lee, United States navy, commander, bound from Pernambuco to Brazil.

Baro- meter.	Temp., air.		Temp., water.		Transparency fathoms.	Deep sea soundings.	Winds.		Clouds.			Weather	Force of vapor, and relative humidity.		
	Mast-head.		Under surface.				Direction per compass.	Force.	Class.	Portion.	Direction from.		Hour.	Force of vapor.	Humidity.
	Deck.	6 a. m.	2 p. m.	Surface.												Temperature.	Depth.
29.82 51				81			ESE., SE. by E.	5	Cu S.	5	Sd. & Ed.	b c q			
29.90 86	77	85		81			SE by S, ESE.	4	Cu S.	5	Sd. & Ed.	b c m			
29.87 86				81			ESE	8	Cu	5	Sd. & Ed.	b c m l.	4 p. m.	20.72	74
29.85 82				80			SE. by E.	4	Cu S.	5	Sd. & Ed.	b c m			
29.85 83				80	75 80 72 200	286	SE					b c			
29.90 88	80	88		81		0	SE. to ESE.	4	Cu	6	Sd. & Ed.	b c	9 a. m.	20.41	70
29.95 80				81			SE. by E.	4	Cu S.	7	Sd. & Ed.	b c m	4 p. m.	20.41	70
29.82 82				82			SE. by E.	4	Cu S.	8	Sd. & Ed.	b c m			
29.83 82				81	72 80 67 200 63 400	0	SE	5				b c q r			
29.85 90		81		80		900	SE	4	Cu S, N.	6	Sd. & Ed. Ed.	b c q r	9 a. m.	21.69	77
29.85 92				80			ESE	4	Cu S.	7		b c m	4 p. m.	21.39	77
29.80 82				79			SE. by E.	4	Cu S.	6	Sd. & Ed.	b c m			
29.82 88	80	80		81			SE. by E., SE.	8	Cu S.	5	Sd. & Ed.	b c m	9 a. m.	21.69	77
29.79 86				81	79 10 17 72 80 15 b. 67 200 64 400	0	SE. by S.	6	Cu S.	6	Sd. & Ed.	b c m	4 p. m.	22.09	74
29.79 84				80			SE. by S.	6	Cu S.	6	Sd. & Ed.	b c m			
29.82 82				80			SE. by S. to SE. by E.	4	Cu, cu S.	8	Sd. & Ed.	b c m			
29.86 86	79	82		80			SE. by E., SE.	4	Cu, cl S.	6	Sd. & Ed.	b c m	9 a. m.	20.72	74
29.85 84				81			SE	4	Cu S.	4	Sd. & Ed.	b c m	4 p. m.	21.69	77
29.80 82				80			ESE to SE by S	2	Cu S.	8	Sd. & Ed.	b c m			
29.84 88	79	88		81			SE. by E., SE. by S.	8	Cl cu, cu S.	4	Sd. & Ed.	b c	9 a. m.	21.69	77
29.83 86				82			SSE	8	Cl cu, cu S.	5	Sd. & Ed.	b c m			
29.86 82				80			SE	4	Cu N, cu S.	6	Sd. & Ed.	b c m q r			
29.87 87	81			80	80 10 71 80 75 200 75 200 75 80 78 80	2150	SE. by E.	8	Cu S.	6	Sd. & Ed.	b c m	9 a. m.	21.69	77
29.82 84				81			SSE., ESE	8	Cu	7	Sd. & Ed.	b c m	4 p. m.	21.39	74
29.84 82				80			ESE	8	Cu S.	4	Sd. & Ed.	b c m			
29.89 86	80			80			SE	4	N, cu S.	7	Sd. & Ed.	b c q			
29.85 84				81			SE., SE. by E.	4	Cu S.	4	Sd. & Ed.	b c m			
29.84 82				80			ESE	4	Cu S, cu	4	Sd. & Ed.	b c m			
29.87 86				81			ESE., SE.	4	Cu	5	Sd. & Ed.	b c	9 a. m.	21.69	77
29.86 84				81			SE. by S., SE.	4	Cu	7	Sd. & Ed.	b c m	4 p. m.	21.39	74
29.91 82				80			SE. to ESE.	4	Cu	6	Sd. & Ed.	b c m			
29.84 86				81			SE.	4	Cu, N.	8	Sd. & Ed.	b c q p	9 a. m.	22.70	81
29.84 84				81			SSE, SE by E.	4	Cu, cu S.	6	Sd. & Ed.	b c	4 p. m.	21.39	77
29.92 82				81			SE by E, ESE.	8	Cu S, N.	7	Sd. & Ed.	b c q r			
29.91 82				80			E. by S. to SE	4	Cu S, N.	9	Sd. & Ed.	b c q r-o	9 a. m.	23.01	84
29.97 82				80			ESE	2	Cu S.	8	Sd. & Ed.	b c	4 p. m.	22.00	81
29.92 82				80			ESE	4	Cu S, N.	6	Sd. & Ed.	b c m			
29.88 86	80	88		81			ESE	8	Cu S, N.	8	Sd. & Ed.	b c m p.	9 a. m.	23.07	84

Abstract log of the United States surveying brig *Dolphin*, Lieut. ~~James~~

Date	Latitude.	Longitude	Surface current.		Under currents.		Vari- ation.
			From vessel.	From boat.			
			Direction.	Knots per hour.	Direction.	Knots per hour.	
			Depth.	Direction.	Knots per hour.		
1859. March	South	West				West	
18, 5 p. m.	8 45 0 . . .	83 47 0 .				10 5 @	
8 p. m.	8 30 18 * p. m.	83 39 38 * p. m.					
19, 4 a. m.	8 24 10 @ m.	83 51 0 @ a. m.				10 20 @	
7 1/2 a. m.	8 44 0 .	83 55 0 .					
noon	8 34 24 @	83 49 25 @	S. 78° W	1 5			
5 p. m.	8 18 0 .	83 39 0 .				10 1 @	
8 p. m.	8 1 39 * p. m.	83 29 42 * p. m.					
20, 4 a. m.	8 4 8 D. R.	83 22 48 D. R.					
noon	8 46 15 " .	83 22 7 " .	S. 73° W	1.5			
8 p. m.	8 48 0 " .	83 29 31 " .					
21, 4 a. m.	8 46 15 @ m.	83 4 45 * a. m.					
7 1/2 a. m.	8 4 0 .	83 10 0 .				10 24 @	
noon . .	8 28 35 @	83 17 50 @	N 64° W	1 0			
5 p. m.	8 51 0 .	83 38 0 .				10 11 @	
8 p. m.	8 46 17 @ m.	83 32 12 * p. m.					
22, 4 a. m.	8 53 41 " m.	83 23 55 @ a. m.				10 16 @	
7 1/2 a. m.	8 40 0 .	83 30 0 .					
noon . .	8 34 53 @ .	83 35 2 @	N. 78° W.	1.5			
8 p. m..	8 30 41 "	83 31 0 @		W. by N..	1 4	10 W by N. 10 W. by N.	
8 p. m.	8 31 12 * p. m.	83 36 12 * p. m.				1 4 1.4	
23, 4 a. m.	8 27 44 @ m.	83 46 8 @ a. m.				10 6 @	
noon . .	8 29 56 "	83 43 35 @	N. 75° W.	1.3			
4 1/2 p. m.	8 36 0 .	83 43 0 .				11 4 3	
8 p. m..	8 29 19 @ m.	83 42 0 @ p. m.				10 20 @	
24, 4 a. m.	8 33 0 @ m.	83 44 6 * a. m.					
5 1/2 a. m.	8 36 0 .	83 43 0 .				10 6 @	
noon . .	8 48 8 @	83 42 15 @ a. m.	N. 71° W.	0 9			
6 p. m.	8 56 50 " m.	83 37 32 " a. m.					
25, 4 a. m.	8 54 18 " m.	83 31 26 " a. m.					
11.37 a. m.	4 0 23 " m.	83 40 44 @		W. by N..	1.1		
noon...	4 0 23 " .	83 40 44 @	N. 83 W..	0.8		11 13 @	
8 p. m. .	4 2 52 * p. m.	83 46 30 D p. m.					
26, 4 a. m..	4 9 54 @ m.	84 5 0 * a. m.					
7 1/2 a. m.	4 3 0 . . .	84 5 0 .				11 15 @	
noon..	8 59 7 @ .	83 53 7 @	N 75° W	1 2			
8 p. m. .	8 54 0 "	83 53 0 "				10 41 @	
8 p. m. .	8 47 52 * p. m.	83 55 0 " p. m.					
27, 4 a. m.	8 50 51 " a. m.	83 53 23 " a. m.					
7 a. m.	8 49 0 " a. m.	83 52 27 " a. m.		NW.....	0.9	10 NW..... 80 NW. by W	
noon..	8 48 36 " a. m.	83 53 33 @	N 60° W.	1.0		1 0 1.1	
8 p. m.	4 0 22 " a. m.	84 16 51 " p. m.				10 5 @	
28, 4 a. m. .	4 19 6 @ m...	84 23 17 * a. m.					

Phillips Lee, United States navy, commander—Continued.

Day.	Temp., air.		Temp., water.		Transparency fathoms.	Deep sea soundings.	Winds.		Clouds.		Weather.	Force of vapor, and relative humidity.			
	Mast-head.		Under surface.				Direction per compass.	Force.	Class.	Portion.		Direction from.	Hour.	Force of vapor.	Humidity.
	0 a. m.	2 p. m.	Surface.	Temperature. Depth.											
1.17.84			80				SE. by E.	4 Cu	7 Ed. & Ed.	b c m s					
1.18.84			80				SE. to ENE	4 Cu, cu S, N.	8 Ed. & Ed.	b c q r			9 a. m.	21.69	77
1.19.84	79	82	80				SE., SE. by E.	4 Cu, cu S	6 Ed. & Ed.	b c m					
1.20.84			81				SE. by S to SE.	4 Cu	5 Ed. & Ed.	b c m			4 p. m.	21.89	74
1.21.84			80				SE. by S to SE.	8 Cu S, N	8 Ed. & Ed.	b c q r					
1.22.84	77	77	80				SE. by S. to ESE.	4 N	10 Ed. & Ed.	o t l r.			9 a. m.	22.18	100
1.23.84			80				E. by S. to SE.	3 Cu S, N.	7 Ed. & Ed.	b c l p.			4 p. m.	22.88	100
1.24.84			80				WNW, E. by N	1 Cu S	6 Ed. & Ed.	b c m l.					
													9 a. m.	23.01	84
1.25.84	79	82	80				SE. by E.	4 Cu S	5 Ed. & Ed.	b c m					
1.26.84			80				SE.	3 Cu S.	6 Ed. & Ed.	b c m q			4 p. m.	22.70	81
1.27.84			81				SE.	4 Cu S.	4 Ed. & Ed.	b c m.					
													9 a. m.	21.39	74
1.28.84	79	83	81				SE., SE. by S.	3 Cu S.	6 Ed. & Ed.	b c m.					
1.29.84			81	80	0		SE. by E	3					4 p. m.	21.89	77
1.30.84			81	80	1000		SE. by S	3 Cu S, cl	6 Ed. & Ed.	b c m					
1.31.84			80				SE. by S. to SE.	2 Cu S	5 Ed. & Ed.	b c m l.					
1.32.84			81				SE. by E.								
1.33.84	80	83	81				Calm	Cu S, cl.	6 Ed. & Ed.	b c m l.			9 a. m.	21.69	77
1.34.84			81				E by S. to SE.	2 Cu S	8 Ed. & Ed.	b c m			4 p. m.	21.89	74
1.35.84			81				ENE. to ESE.	2 Cu S.	7 Ed. & Ed.	b c m					
1.36.84	80	80	80				E. E. by S.	2 Cu S, N	6 Ed. & Ed.	b c m q			9 a. m.	21.69	77
1.37.84			79				Variable, Sd. & Wd	1 N.	9 Ed. & Ed.	o r			4 p. m.	22.88	100
1.38.84			79				Sd. & Ed. NE, North.	8 to N	10 0		o q r.				
1.39.84			80	80	0		Calm.				b c m		9 a. m.	22.31	84
1.40.84	77	83	80				NW.	3 Cu S	8 Ed. & Ed.	b c m					
1.41.84			81				Calm	Cu S, cl cu	7 Ed. & Ed.	b c m.			4 p. m.	21.67	71
1.42.84			81				Variable.		7 Ed. & Wd	b c m.					
1.43.84			81				SE. by E. to SE. by S.	2 Cu S	5 Ed. & Ed.	b c m					
													9 a. m.	21.69	77
1.44.84	79	78	83				E by S to S by E, Variable	Cu S	7 Ed. & Ed.	b c					
1.45.84			81	78	90		Calm.				o q		4 p. m.	21.34	81
1.46.84			81				Calm	N, cu S	8 Ed. & Ed.	o q b c					
1.47.84			81				Calm	Cu S	8 Ed. & Ed.	b c m.					
1.48.84			81	70	100										
1.49.84			81	71	200	15	SE. by S	2					9 a. m.	22.70	81
1.50.84	79	83	83				SE. by S to ENE.	2 Cu S, N	5 Ed. & Ed.	b c p.					
1.51.84			83				E. to SE-E	3 Cu S	9 Ed. & Wd	b c m.			4 p. m.	22.81	84
1.52.84			81				SE. by E	3 Cu S, N.	7 Ed. & Ed.	b c m l q					

Abstract log of the United States surveying brig Dolphin, Lieut.

Date.	Latitude.	Longitude.	Surface current.				Under currents.			Variation.
			From vessel.		From boat.					
			Direction.	Knots per hour.	Direction.	Knots per hour.	Depth.	Direction.	Knots per hour.	
1852. March.	South.	West.							West.	
28, 6 a. m.	4 11 36 ☉ m. ...	34 22 25 * a. m. ...			NW	1.4	{ 10 NW 80 NW	1.4	9 15 ☉	
noon.	4 18 25 "	34 37 55 ☉ ———	N. 50° W.	1.0				1.5		
3 p. m.	4 19 55 " m. ...	34 45 40 " p. m. ...							9 36 ☉	
8 p. m.	4 21 17 " m. ...	34 52 6 " p. m. ...								
29, 4 a. m.	4 21 56 * a. m. ...	34 57 49 * a. m. ...								
6 a. m.	4 20 22 " a. m. ...	34 57 34 ☉ a. m. ...			SW	0.6				
noon.	4 29 58 ☉	35 2 49 ☉ ———	N. 61° W.	1.3						
8 p. m.	4 28 31 "	35 5 44 " p. m. ...							9 8 ☉	
30, 4 a. m.	4 26 59 " m. ...	35 6 17 * a. m. ...								
6 a. m.	4 26 21 " m. ...	35 9 6 " a. m. ...			South	2.0			8 45 ☉	
noon.	4 21 47 "	35 17 5 ☉ ———	N. 88° W.	1.7						
3 p. m.	4 22 30 " m. ...	35 24 35 ☉ p. m. ...								
31, 4 a. m.	4 24 2 " m. ...	35 21 37 * a. m. ...								
6 a. m.	4 24 18 " m. ...	35 23 21 * a. m. ...								
noon.	4 17 0 "	35 19 13 ☉ ———	N. 77° W.	0.9						
3 p. m.	4 17 36 " m. ...	35 20 16 " p. m. ...			SE	1.4	10 SE	1.2	8 56 ☉	
8 p. m.	4 18 52 " m. ...	35 24 21 " p. m. ...								
April.										
1, 4 a. m.	4 12 56 * a. m. ...	35 24 30 * a. m. ...								
7½ a. m.	4 0 0	35 28 0							8 48 ☉	
noon.	3 34 21 ☉	35 38 29 ☉ ———	N. 67° W.	0.8						
3 p. m.	3 18 6 " m. ...	35 44 58 " p. m. ...			W. by S	0.9			8 57 ☉	
8 p. m.	3 11 46 * p. m. ...	35 56 37 * p. m. ...								
2, 4 a. m.	2 40 18 " a. m. ...	36 29 50 * a. m. ...								
6 a. m.	2 32 50 " a. m. ...	36 36 20 * a. m. ...			WNW	1.0	{ 10 WNW 80 NW	1.0	8 47 ☉	
noon.	2 26 47 ☉	36 45 57 ☉ ———	S. 87° W.	1.0				2.0		
8 p. m.	2 27 14 * p. m. ...	36 45 39 * p. m. ...								
3, 4 a. m.	2 21 18 ☉ m. ...	36 36 5 * a. m. ...								
5.45 a. m.	2 21 44 " m. ...	36 35 51 * a. m. ...			W. by N.	0.7	{ 10 WNW 80 WNW	1.1	8 37 ☉	
noon.	2 22 42 "	36 35 37 ☉ ———	S. 53° W.	0.8				1.2		
6 p. m.	2 22 27 * p. m. ...	36 32 6 * p. m. ...							8 3 ☉	
4, 4 a. m.	2 22 50 " a. m. ...	36 33 53 * a. m. ...								
5.40 a. m.	2 22 2 " a. m. ...	36 34 23 * a. m. ...			NW	0.3	{ 10 NW by W. 80 WNW	0.3	8 38 ☉	
noon.	2 15 51 ☉	36 33 27 ☉ ———	N. 59° W.	0.8				0.7		
4½ p. m.	2 18 0	36 43 0							9 28 ☉	

Samuel Phillips Lee, United States navy, commander—Continued.

Hour.	Temp., air.		Temp., water.		Transparency fathoms	Deep sea soundings.	Winds.		Clouds.		Weather.	Force of vapor, and relative humidity			
	Mast-head.		Under surface.				Direction per compass.	Force.	Class.	Portion		Direction from	Hour.	Force of vapor.	Humidity
	Deck	5 ft m.	2 ft m	Surface Temperature.												Depth.
20.00.34			81	{ 79 80 } 71 900	11 b.	0	ESE	4			b c m.				
20.07.20		63	82	{ 77 80 } 70 345		1000	ESE. to SE	3 Cu		8 Ed. & Ed.	b c m.	9 a.m.	22.09	74	
20.09.23			82	{ 77 80 } 79 200		0	SE	2			b c	4 p.m.	21.09	77	
20.09.34			82	{ 77 80 } 75 345		2440	SE, ESE	3 Cu S		7 Ed. & Ed	b c m.				
20.09.42			82				ESE	2 Cu S		4 Ed. & Ed	b c q.				
20.10.23			82	{ 77 80 } 73 200		0	SE by E	3			b c m				
20.10.37	61	63	82			600	SE. by E., E. by S. ESE	3 Cu S		8 Ed. & Ed	b c q.	9 a.m.	21.09	77	
20.10.50			81				NE. by E.	1	Cu S, N	7 Ed. & Ed	b c p q	4 p.m.	21.09	77	
20.10.59			81			0	SE. to E	2 N, cu S		10 Ed. & Ed	b c q				
20.11.00			81	{ 78 80 } 74 200		1000	E. by S	2			b c.				
20.11.06	61	59	82	{ 78 80 } 73 345			E. by S. to ESE.	2 Cu S		7 Ed. & Ed.	b c m.	9 a.m.	22.01	84	
20.11.32			82				NE by E to E	1 Cl, cu S, N		8 Ed. & Ed Eastward	b c q	4 p.m.	21.09	74	
20.12.50			82			2700.7	NE. to SE	1 N, cu S		7 Ed. & Ed	b c q r				
20.12.59			82	{ 74 80 } 71 200		0	Calm				b c				
20.12.52		80	82	{ 70 80 } 70 345		0	S., NW, N.	1 Cu, N.		7 Ed. & Ed.	b c q r	9 a.m.	22.31	84	
20.12.57			82	{ 77 80 } 74 200		0	Calm					4 p.m.	21.09	77	
20.12.59			82	{ 75 80 } 75 345		1000	Calm	Cl, cu S...		6 Ed. & Ed	b c.				
20.13.30			81				Calm		Cu S, N	8 Ed. & Ed	b c m q p	9 a.m.	21.09	77	
20.13.39	77	62	82				ESE. to ENE	3 Cu S, N.		7 Ed. & Ed.	b c q p.				
20.13.55			82	{ 78 80 } 63 200		0	East	4				4 p.m.	21.09	77	
20.14.34			82	{ 64 80 } 64 345		1000	East	4 Cu		5 Ed. & Ed	b c m				
20.15.21			82				NE by E, ENE	3 Cu, cu S		5 Eastward.	b c				
20.15.54			82	{ 73 80 } 69 200	12	0	ENE	2							
20.16.08	50		82	{ 65 80 } 65 345		1000	ENE to NE	3 Cu S, N		5 Eastward.	b c m p	9 a.m.	22.00	81	
20.16.39			82				NE. by N. to N by W	2 Cu S, N.		Nd. & Ed.	b c m p.	4 p.m.	22.31	84	
20.16.50			82				NE. by E. to N, by W.	2 Cu S, cu S		7 Nd. & Ed	b c m...				
20.17.00			81	{ 72 80 } 66 200	15	0	North	2							
20.19.54			82	{ 61 80 } 61 345		1000	North	1 Cu, N		4 Nd. & Ed	b c p.	9 a.m.	22.31	84	
20.24.54			82				N by E., N. by W.	1 Cu S		7 Nd. & Ed	b c q				
20.26.00			80				Calm.	Cu S		8 Ed. & Ed	b c m				
20.25.00			81	{ 69 80 } 66 200		0	Calm					9 a.m.	21.12	78	
20.26.54			82	{ 66 80 } 66 345		1000	E., ENE...	1 Cu, cl...		6 Ed. & Ed	b c.	4 p.m.	21.09	74	

Abstract log of the United States surveying brig Dolphin, Lieut.

Date.	Latitude.	Longitude.	Surface current.				Under currents.			Variation.
			From vessel.		From boat.		Depth.	Direction.	Knots per hour.	
			Direction.	Knots per hour.	Direction.	Knots per hour.				
1852. April.	° South.	° West.								West.
4, 8 p. m.	2 7 16 * p. m.	86 49 6 * p. m.								
5, 4 a. m.	1 43 17 " a. m.	87 7 54 * a. m.								
7½ a. m.	1 28 0	87 19 0								8 12 ⊙
noon.	1 16 6 ⊙	87 30 10 ⊙	N. 87° W.	0.4						
8 p. m.	1 6 47 ⊙ * p. m.	87 34 2 ⊙ * p. m.			East.	0.4	10 E. by N. ... 80 E. by N. ...	0.7 1.2		8 38 ⊙
8 p. m.	1 8 3 * p. m.	87 34 49 * p. m.								
6, 4 a. m.	0 35 39 D. R. ...	87 36 42 D. R. ...								
noon.	0 15 55 ⊙	87 51 56 ⊙ p. m.	N. 87° E.	0.5						
8 p. m.	0 6 11 " m. ...	88 0 49 " p. m.								
	North.									
7, 4 a. m.	0 6 18 * a. m.	88 36 0 * a. m.								
6 a. m.	0 10 23 " a. m.	88 44 0 * a. m.			SE.	0.7	10 SE. 80 ESE.	0.8 1.4		7 38 ⊙
noon.	0 18 39 ⊙	88 59 26 ⊙	S. 37° E.	0.9						
4¾ p. m.	0 35 0	89 22 0								8 0 ⊙
8 p. m.	0 43 46 * p. m.	89 42 12 ⊙ p. m.								
8, 4 a. m.	0 42 58 " a. m.	40 11 20 * a. m.								
9.20 a. m.	0 46 46 ⊙ m. ...	40 34 41 ⊙ a. m.			SSW	1.0				6 28 ⊙
noon.	0 43 29 "	40 40 30 " p. m.	S. 9° W.	1.0						
8 p. m.	0 54 27 " m. ...	40 51 24 " p. m.								6 7 ⊙
8 p. m.	0 58 39 * p. m.	40 55 36 * p. m.								
9, 4 a. m.	0 50 14 " a. m.	40 46 54 * a. m.								
7 a. m.	0 49 0 ⊙ * a. m.	40 44 29 " a. m.			South	0.8				6 8 ⊙
noon.	0 59 59 ⊙	40 58 16 ⊙	South	1.8						
8 p. m.	0 57 5 " m. ...	41 6 24 " p. m.			SSW	1.7	10 SSW. 80 S. by E. ...	1.7 1.7		
8 p. m.	0 51 22 " m. ...	41 6 49 " p. m.								
10, 4 a. m.	1 9 50 * a. m.	41 21 33 " a. m.								
7½ a. m.	1 6 0	41 16 0								6 18 ⊙
noon.	0 53 14 ⊙	41 3 33 ⊙	S. 15° W.	1.2						
8 p. m.	0 50 20 " m. ...	41 2 43 " p. m.								
11, 4 a. m.	1 5 8 ⊙ a. m.	41 5 57 * a. m.								
noon.	0 59 59 ⊙	41 3 51 ⊙	S. 15° W.	1.2						
4¾ p. m.	0 59 0	41 23 0								6 20 ⊙
8 p. m.	1 1 20 * p. m.	41 48 18 * p. m.								
12, 4 a. m.	1 6 16 ⊙ a. m.	42 50 39 * a. m.								
5.10 a. m.	1 7 6 ⊙ a. m.	42 53 15 * a. m.			WSW	0.6	10 W. by S. ... 80 N. by W. ...	0.6 1.1		4 35 ⊙
noon.	1 6 10 ⊙	43 21 36 ⊙	SSE.	0.5						
8.15 p. m.	1 6 57 " m. ...	43 43 40 " p. m.								4 30 ⊙
8 p. m.	1 7 46 * p. m.	44 7 34 * p. m.								

Samuel Phillips Lee, United States navy, commander—Continued.

Time.	Temp., air.		Temp., water.		Transparency fathoms.	Deep sea soundings.	Winds.	Clouds.			Weather.	Force of vapor, and relative humidity			
	Mast-head.	Surface.	Under surface.					Direction per compass.	Class.	Portion.		Direction from.	Hour.	Force of vapor.	Humidity
			Temperature.	Depth.											
12.54			83	....			ENE. to NE. by N	1 Cu, cu S	7 Nd. & Ed	b c m	....	....	....
12.58			81	....			NE. by N. to NE.	3 Cu	5 Nd. & Ed	b c m	....	....	....
12.59			82	....		0	NE	3 Cu	8 Nd & Ed	b c	9 a.m.	21.69	77	
12.59			82	{ 72 80 } 69 200 67 345		1000	NE	1	....	....	4 p.m.	21.39	77
12.59			81	....			NE	2 Cu	6 Nd & Ed	b c q	....	....	....
12.59			80	....			NE.	3 Cu, cu S, N	7 Nd. & Ed	b c q p.	....	....	....
12.59			91	....			Eastward. ESE, NE	5 Cu, N	10 Eastward	o q r	9 a.m.	22.58	96	
12.59			80	....			ENE, NE	3 Cu S, N	9 Eastward	o q p	4 p.m.	21.65	84	
12.59			80	....					Nd. & Ed	....	....	....	....
12.59			80	....		0	NE. by N	4 Cu S	10 Nd & Ed	o m	....	....	....
12.59			80	{ 74 80 } 74 200 69 345		1000	NE. by N	4	....	o m	9 a.m.	22.00	81	
12.59			80	....			NE. by N	4 Cu	6 Nd & Ed	b c	....	....	....
12.59			79	....			NE. by N	4 Cu	5 Nd. & Ed	b c m	4 p.m.	21.68	77	
12.59			79	....		0	NE. by N	4 Cu	6 Nd & Ed	b c m	....	....	....
12.59			80	....		400	NE	4	....	b c m	9 a.m.	21.89	74
12.59			81	....			NE by E, NE.	4 Cu	5 Nd. & Ed	b c m	4 p.m.	21.69	77	
12.59			81	....			NE.	3	....	b c m	....	....	....
12.59			80	....			NE.	3 Cu	6 Nd. & Ed	b c m	....	....	....
12.59			79	....		0	NE. to ENE	4 Cu	5 Nd & Ed	b c m	....	....	....
12.59			79	....		500	NE	4	....	b c m	....	....	....
12.59			80	{ 73 80 } 73 200 69 345		2980	NE by E, NE.	4 Cl cu	7 Nd & Ed	b c m	....	....	....
12.59			81	....		0	NE.	3	....	b c q p.	4 p.m.	22.70	81
12.59			80	....			NE.	3 Cu S, N	8 Nd & Ed	b c q	....	....	....
12.59			79	....			NE, KNE	4 Cu S, N	....	o q p	....	....	....
12.59			80	....			ENE	5 Cu S, N	9 Nd & Ed	b c q p.	9 a.m.	22.69	88	
12.59			90	....			ENE	5 Cl, cu S, N	9 Nd & Ed	o q r	....	....	....
12.59			79	....			NE. by E	4 Cu S	10 Nd & Ed	o q	....	....	....
12.59			81	....			NE. by E, NE by N.	4 Cl cu, cu S, N	9 Nd & Ed	o p q-b c m p	9 a.m.	22.00	81	
12.59			80	....			NE. by E.	4 Cu, cu S	7 Nd & Ed	b c m	4 p.m.	22.00	81	
12.59			80	....		0	NE. by E.	4 Cu S	6 Nd & Ed	b c m	....	....	....
12.59			80	{ 79 80 } 74 200 73 345	14	1000	NE. by E.	3	....	b c m	9 a.m.	22.70	81	
12.59			81	....		0	NE. by E.	3 Cu	....	b c m	....	....	....
12.59			81	{ 79 80 } 73 200 71 345		2900	NE. by E.	3	....	b c m	4 p.m.	....	81
12.59			81	....			NE. by E, ENE	4 Cl cu, cu S	6 Nd & Ed	b c m	....	....	....

Samuel Phillips Lee, United States navy, commander—Continued.

Hour.	Temp. air.		Temp. water.		Transparency fathoms.	Deep sea soundings.	Winds. Direction per compass.	Clouds.			Weather.	Force of vapor, and relative humidity.		
	Mast-head.		Under surface.					Class.	Portion.	Direction from.		Hour.	Force of vapor.	Humidity.
	Depth of a. w.	S. p. m.	Surface.	Temperature.											Depth.
19 51 51			81			0	NE. by E.	3 Cu S.	3 Nd. & Ed.	b c m.				
19 50 51			81	<div>76 80 78 800 74 845</div>		1000	NE. by E.	3		b c m.	9 a. m.	23 70	81	
19 49 50		54	82			89 1/2	NE. by E.	3 Cu S, N	7 Nd. & Ed.	b c m.				
19 48 50			82			0	Variable	3		b c.	4 p. m.	21 69	77	
19 48 50			81			0	W, N. E	2 Cu S, N.	7 Nd. & Ed.	b c p.				
19 47 50			82				NE.	2 Cu S, N.	7 Nd. & Ed.	b c m q r.				
19 53 54			81			18	NE.	2			9 a. m.	23 44	81	
19 52 54	79	83	84			0	NE.	3 Cl, cu S.	6 Nd. & Ed.	b c.				
19 45 52						12					4 p. m.	23 19	78	
19 40 54			82			0	NE.	2 Cl S, cu	7 Nd. & Ed.	b c.				
19 31 51			81				NE.	3 Cu, cu S	5 Nd. & Ed.	b c				
19 56 52	78	83	83				NE., East	3 Cu	5 Nd. & Ed.	b c.	9 a. m.	23 18	78	
74			82				NE. by N., to ENE	3 Cu S, N	8 Nd. & Ed.	b c q p.	4 p. m.	23 75	85	
70			82				Ed., NE.	3 Cu S, N	7 Nd. & Ed.	b c q p l.				
74			81				ENE	3						
70	75	83	83				ENE. to E.	4 Cu, N	6 Nd. & Ed.	b c p.				
74			82				E, ENE.	3 Cu, cu S.	9 Nd. & Ed.	b c m.	4 p. m.	21 18	78	
73			81				ENE	3 Cu S, cu	3 Nd. & Ed.	b c m.				
70	72	83	84				E by S to NE.	3 Cu, cl.	3 Nd. & Ed.	b c.	9 a. m.	21 69	77	
53			81				NNE	2 Cu S, N	9 Nd. & Ed.	b c p q l.				
73							ENE., ESE.	1 Cu S	3	b c m l p.				
70									Ed. & Ed.					
70	77	83					ENE, N by E.	1 Cu	3 Eastward.	b c.				
74							NNE.	3 Cu, N	9 Nd. & Ed.	b c p.	4 p. m.	23 70	81	
74							NNE., North	2 Cu, cu S	6 Nd. & Ed.	b c m.				
71 75							North, NNE	1 Cu S	5 Nd. & Ed.	b c m.	9 a. m.	23 75	85	
							NNE.	3 Cu S, N	9 Nd. & Ed.	b c p.	4 p. m.	23 70	81	

Abstract log of the United States surveying brig Dolphin, Lieut. Samuel to New

Date.	Latitude.	Longitude.	Surface currents.			Under currents.			Vari- tion.
			From vessel.		From boat.	Depth.	Direction.	Knots per hour.	
			Direction.	Knots per hour.					
1852. April.	Smith.	West							Wind
20, 4 a. m.									
noon.									
8 p. m.									
21, 4 a. m.									
noon.									
8 p. m.									
22, 4 a. m.									
noon.									
	North.								
8 p. m.	0 10 27 D. R.	49 10 21 D. R.							
9 p. m.	0 13 10 " "	48 11 4 " "							
23, 4 a. m.	0 19 10 " "	48 2 30 " a. m.							
7.30 a. m.	0 30 22 " m.	47 40 30 " a. m.			SW	1.0			
noon.	0 27 56 " "	48 6 29 " a. m.			S. 12° E.	0.5			
2 p. m.	0 30 13 " m.	48 7 10 " p. m.			NE.	1.0			
5 p. m.	0 32 24 " m.	47 38 17 " p. m.							
24, 4 a. m.	0 24 31 " m.	47 29 19 " a. m.							
6.30 a. m.	0 27 25 " m.	47 37 30 " a. m.			S. by E.	1.3			
noon.	0 30 35 " "	47 20 28 " a. m.			S. 16° W.	0.5			
1 p. m.	0 30 58 " m.	47 17 25 " a. m.			E. by S.	0.5			
8 p. m.	0 33 17 " m.	46 46 7 " p. m.							
25, 4 a. m.	0 19 20 " m.	46 25 27 " a. m.							
6 a. m.	0 20 53 " m.	46 15 55 " a. m.			S. by W.	1.0			2 19
noon.	0 29 58 " "	46 7 25 " a. m.			S. 41° E.	0.9			
6 p. m.	0 22 23 " m.	45 42 21 " p. m.							
26, 4 a. m.	0 59 41 " m.	46 10 10 " a. m.							
5.30 a. m.	1 1 29 " m.	45 17 40 " a. m.			W by N	0.6			
noon.	0 54 45 " "	45 50 19 " a. m.	West	0.9					
4 1/2 p. m.	0 49 0 " "	45 40 0 " p. m.							2 20
8 p. m.	0 47 20 " p. m.	45 20 1 " p. m.							
27, 4 a. m.	0 42 59 " a. m.	45 4 59 " a. m.							
6 10 a. m.	0 43 22 " a. m.	45 1 2 " p. m.			West	0.8	10 West 80 WSW	1.0 0.6	2 21
noon.	0 49 33 " "	44 59 26 " p. m.	N 51° W.	1.6					
4 1/2 p. m.	0 54 0 " "	44 52 " p. m.							2 22
8 p. m.	1 2 31 " p. m.	44 56 21 " p. m.							
28, 4 a. m.	1 13 49 " a. m.	44 42 15 " a. m.							
6 30 a. m.	1 10 4 " a. m.	44 40 45 " a. m.			S. by E.	0.9	10 E. by S.	0.8	
noon.	1 14 30 " a. m.	44 59 8 " a. m.							
8 p. m.	1 27 24 " a. m.	44 1 25 " a. m.							

Lee, United States navy, commander, bound from Pará, Brazil,

air.	Temp., water.		Winds.	Clouds.		Weather	Force of vapor, and relative humidity.		
	Surface.	Under surface.		Class.	Direction from.		Bar.	Force of vapor.	Humidity.
9 p. m.	Surface.	Temperature.	Depth.	Transparency fathoms.	Deep sea soundings.	Direction per compass.	Force.	Portion.	Direction from.
78	74					E. to NNE.	2 N.	10 Nd. & Ed.	o p.
						NE. to S. SW.	1 Cu S, N.	10 Nd. & Ed.	o p.
						N, E, S.	1 N, cu S.	10	or
						E, SK.	2 Cu S, cu	9	Eastward
						ENE., Var	1 Cu S, cl	9 Nd & Ed.	o m—bc
80						N, NE.	2 Cu S, cl S, N	9 Nd & Ed.	bc p.
80						N by E, E by S	2 Cu S, cu	6 Nd & Ed.	bc m.
81						East.	2 Cu S.	7 Nd & Ed.	bc m.
						ENE. to NE.	4 Cu S, N.	9 Nd. & Ed.	bc q r.
81						NE to E by N	2		o q t l.
81						NE, ENE.	2 Cu S, N.	10 Nd. & Ed.	o q r l.
81					10	ENE.	2		o q r l.
81					0	ENE, N by E.	4 N, cu S.	10 Nd & Ed.	o r q l.
81					12	N. by E.	2		o q r.
81					0	N. by E.	4 Cu S, N.	10 Nd. & Ed.	o q r.
81						NE. to N.	2 Cu S, N.	10 Nd. & Ed.	o q r.
81	78	18			20	North.	2		o.
81					0	N. by E. to NNW.	2 Cl, cu S.	8 Northward	o—bc.
81					19	N. by E.	2		4 p. m.
81					0	NNE to N by W.	2 Cu S, N.	9	Northward
81						N. by E.	2 N, cu S.	9 Nd & Ed.	bc p.
81					27	NNE	2 N, cu S.	8 Nd. & Ed.	bc p.
81					0	N by E to NE by N.	2 Cu S.	6 Nd. & Ed.	bc.
81						NE, NE by E.	4 Cu S, cl cu	7 Nd & Ed.	bc.
81						NE.	4 Cu S.	5 Nd & Ed.	bc.
81					43	NE. by N	4		9 a. m.
81					0	NE. by N	4 Cu	6 Nd. & Ed.	bc
81					100	NE. by N	4 Cl, cu S.	7 Nd & Ed.	bc
81						NNE. to ENE	2 Cu S.	7 Nd & Ed.	bc
81	78	80			0	NE. by N	2		9 a. m.
81	75	800			1000	NE. by N to N. by W	2 Cu	6 Nd & Ed.	bc m.
81	71	845				NNW to N. by E.	2 Cu S, cl cu	6 Nd. & Ed.	bc
81	78	800			0	N. to N by E.	4 Cl cu, cu S.	7 Nd. & Ed.	bc
81	79	80				NNE	4		
81					500	NNE to N by W	4 N, cu S.	9 Nd. & Ed.	o q r.
81						NE.	2 N, cu S.	10 Nd. & Ed.	o q r m.

Phillips Lee, United States navy, commander—Continued.

Date.	Latitude.	Longitude.	Surface currents.				Under currents.	
			From vessel.		From boat.			
			Direction.	Knots per hour.	Direction.	Knots per hour.	Depth.	Knots per hour.
1892. April.	North.	West.						
29, 4 a. m.	0 51 57	48 24 56						
5.30 a. m.	0 54 39	48 35 41			SE	0.9	10 SE 30 SE	1 12
noon	1 10 7	48 31 6						
8 p. m.	1 11 9	48 7 43						
30, 4 a. m.	1 14 0	48 10 0						
noon	1 3 3	48 16 45	N. 14° E.	1 2				
8 p. m.	0 39 20	48 55 4						
May								
1, 4 a. m.	0 34 26	44 16 10						
8 a. m.	0 42 31	44 21 10			E. 1/2 S.	0.8		
noon	0 41 5	44 41 33						
8 p. m.	0 24 4	45 16 32						
2, 4 a. m.	0 29 27	45 30 16						
8 1/2 a. m.	0 23 0	45 48 0						
noon	0 12 58	46 3 9	N 18° W	0.5				
	South							
4 1/2 p. m.	0 3 0	46 19 0						
8 p. m.	0 14 19	46 31 58						
3, 4 a. m.	0 34 5	46 35 28						
noon	0 31 33	46 57 6	N. 75° E.	0.9				
8 p. m.								
4, 4 a. m.								
noon								
8 p. m.								
5, 4 a. m.								
noon								
8 p. m.								
6, 4 a. m.								
noon								
8 p. m.								
7, 4 a. m.								
noon								
8 p. m.								
8, 4 a. m.								
noon								
8 p. m.								
9, 4 a. m.								
noon								
8 p. m.								
10, 4 a. m.								
noon								
8 p. m.								

Sand Phillips Lee, United States navy, commander—Continued.

Date.	Temp., air.		Temp., water.				Deep sea soundings.	Winds.	Clouds.			Weather.	Force of vapor, and relative humidity.		
	Mean.	head.	Under surface.			Direction per compass.			Class.	Portion.	Direction from.		Hour.	Force of vapor.	Humidity.
			Surface.	Temperature.	Depth.											Transparency fathoms.
2.01.00			51	74	80	0	NE. by N	3 Cu, cu S.	9 Nd. & Ed	b c m.					
2.14.00			61	71	200	15	N. by E.	8							
2.27.00	75	68	51	69	845	500	N by E to NE by N	8 Cu, cl cu	7 Nd. & Ed.	b c	9 a. m.	22.31	84		
2.40.00			61				NE by N to NE	8 Cu S	6 Nd. & Ed	b c	4 p. m.	22.31	84		
2.53.00			61				NE to NE by E.	8 Cu, cu S.	5 Nd & Ed.	b c					
3.06.00	73	68	61				NE. by E, E. by N.	4 Cu S	5 Nd & Ed	b c q	9 a. m.	21.84	81		
3.19.00			62				ENE	4 Cl cu, cu S.	7 Nd & Ed	b c	4 p. m.	21.57	92		
3.32.00			62			640	E by N, ENE	8 Cu S, N	8 Nd. & Ed	b c q p					
3.45.00			62			0	ENE	1							
3.58.00	73	77	60				Nd. & Ed., Nd & Wd.	2 N, cu S	10	o q r	9 a. m.	22.32	93		
4.11.00			61				NW, N. by E.	3 N, cu S	9	o p—b c	4 p. m.	22.37	92		
4.24.00			61				Nd. & Ed., Ed. & Wd.	2 Cl cu, cu S, N.	7	Nd. & Ed Eastward					
4.37.00											9 a. m.	22.38	92		
4.50.00	75	68	61				NNW., East.	3 Cl cu, cu S.	8 Eastward.	b c					
5.03.00											4 p. m.	22.38	92		
5.16.00			61				NE by N, NE	8 Cu S, N	7 Nd. & Ed	b c p					
5.29.00			61				NE by E, NE by N.	8 Cu S, N.	6 Nd & Ed.	b c p r					
5.42.00	75	65	61				SE. to NE. by N.	8 Cu, cu S, N	10 Ed. & Ed	o q r.	9 a. m.	22.69	92		
5.55.00			61				ESE, ENE	8 Cu, cu S, cl	8 Eastward.	b c	4 p. m.	21.07	71		
6.08.00			61				N. by E, E.	8 N, cu S	10 Eastward	o q r					
6.21.00	73		61				E, ENE.	8 Cu S, N	10 Eastward	o r	9 a. m.	22.27			
6.34.00			61				ENE.	4 Cu S	8 Eastward	b c	4 p. m.	22.00			
6.47.00			61				NE. to ENE	4 Cu, cu S	6 Nd & Ed	b c					
7.00.00	73		66				NE. to East.	8 Cu S	4 Nd & Ed	b c	9 a. m.	22.09	76		
7.13.00			62				NNW. to ENE	4 Cu S	7 Nd & Ed	b c	4 p. m.	22.79	81		
7.26.00			61				ENE, ESE	2 Cu S, N.	6 Nd & Ed	b c p					
7.39.00	75		61				SE, W	1 S, cu.	7 Eastward	b c m	9 a. m.	22.31	84		
7.52.00			62				Nd & Ed, SW	2 N	9	Nd. & Ed	4 p. m.	22.31	64		
8.05.00			61				Variable.	1 N, cu S.	10 Nd & Ed.	o p					
8.18.00	75	60	62				SW, calm	1 Cu S.	9 Nd. & Ed	b c	9 a. m.	22.13	73		
8.31.00			61				N., NE.	1 Cu S, N	10 Nd & Ed	o p q.	4 p. m.	22.26	92		
8.44.00			61				Calm	Cu S	9 Nd & Ed	b c					
8.57.00	74	61	61				Ed. & Ed., Ed. and Wd.	1 N, cu S	10	o r	9 a. m.	22.27	92		
9.10.00			61				NW to NNE	2 Cu	9 Ed & Ed.	b c—o.	4 p. m.	24.37	92		
9.23.00			61				NW, NNE	1 Cu S	9 Nd & Ed.	b c					
9.36.00	73	62	61				East, NW.	1 Cu S, cl cu	7	b c.	9 a. m.	24.08	86		
9.49.00									Ed & Ed. Northward						
10.02.00			61				N. by W., N.	3 Cu S, cl cu	9	b c l.	4 p. m.	22.31	84		
10.15.00			61				North.	1 N, cu S	10 Nd. & Ed.	o p					
10.28.00			61				Calm	1 Cu	9 Nd & Ed.	b c	9 a. m.	22.38	88		
10.41.00			61				N. to ENE.	3 Cu S, N.	9 Nd. & Ed.	b c—o r.					

Abstract log of the United States surveying brig Dolphin, Lieut.

Date.	Latitude.	Longitude.	Surface current		Under currents.		
			From vessel	From boat	Direction.	Knots per hour.	Variation.
			Direction.	Direction			
			Knots per hour	Knots per hour	Depth		
1852. May.	South.	West					West
11, 4 a. m.							
noon							
8 p. m.							
12, 4 a. m.							
noon							
8 p. m.							
13, 4 a. m.							
noon							
8 p. m.							
14, 4 a. m.							
noon							
6 p. m.							
15, 4 a. m.	0 8 21	48 6 30					
noon	0 28 5	48 11 14					
8 p. m.	0 28 5	48 11 14					
16, 4 a. m.	1 6 16	48 42 58					
noon	1 29 10	48 54 44	N. 49° W.	1.2			
4½ p. m.	1 46 6	48 47 0					0 50
8 p. m.	1 49 12	48 39 31					
17, 4 a. m.	1 57 31	48 39 22					
noon	1 51 18	48 18 41	N. 72° W.	0.9			
8 p. m.	1 59 40	48 2 55					
18, 4 a. m.	2 20 0	48 11 0					
7½ a. m.	2 27 0	48 11 0					0 56
noon	2 29 21	48 5 6	N. 58° W.	1.2			
8 p. m.	2 31 3	47 58 18					
19, 4 a. m.	2 46 48	48 6 10					
7½ a. m.	2 42 0	47 59 0					0 50
noon	2 24 32	47 44 10	N. 77° W.	1.3			
5.40 p. m.	2 36 52	47 43 2					
8 p. m.	2 42 31	47 42 48					
20, 4 a. m.	3 17 59	48 18 21					
9 a. m.	3 39 0	48 18 0					1 44
noon	3 45 8	48 13 12	N. 70° W.	2.4			
4 p. m.	3 36 0	48 6 6					1 47
8 p. m.	3 27 30	48 3 4					
21, 4 a. m.	3 35 31	48 5 16					
8½ a. m.	3 49 0	48 3 0					1 32
noon	3 53 31	48 0 45	N. 58° W.	1.8			

Samuel Phillips Lee, United States navy, commander—Continued.

Barometer.	Temp. air		Temp. water.			Transparency fathoms.	Deep sea soundings.	Winds.		Clouds.		Weather	Force of vapor, and relative humidity			
	Mast-head.		Under surface.					Direction per compass.	Force	Class.	Portion		Direction from.	Hour	Force of vapor.	Humidity
	Deck.	8 a. m.	8 p. m.	Surface.	Temperature.												Depth.
29.8873				81				East	2	Cu S, N	10	Nd. & Ed. Nd & Ed	o r			
29.9456		74		81				E. SE.	1	Cu S, N	10	Eastward Eastward	o p	9 a. m.	22.56	96
29.7978				81				NNE.	1	N	10	Nd & Ed Nd & Ed	o r	4 p. m.	22.99	92
29.7975				81				Calm		Cu S, N	10	Eastward Eastward	o p			
29.6156				81				Variable	1	Cl cu, cu S	8	Eastward Ed & Ed	b c	9 a. m.	22.94	96
29.7462				81				Variable	2	Cu S, cl S	9	Nd & Ed Southward	b c	4 p. m.	22.56	96
29.7474				80				SSW., SSE.	2	N	10	0	o r			
29.8979	74	75		81				SSE., SE.	1	N	10	Ed & Ed Ed & Ed	b c p	9 a. m.	22.58	96
29.7429				81				Calm		Cu S, N	8	Ed & Ed	b c p	4 p. m.	22.92	89
29.7579				81				NE, NE by E	2	Cu S	6	Nd & Ed.	b c			
29.9256	75	68		82				ENE	2	Cu, cu S	6	Nd & Ed.	b c			
29.8980				82				N to E.	2	Cu S	7	Nd & Ed	b c p.	4 p. m.	22.98	92
29.7876				82				ESE	3	Cu S	7	Eastward	b c			
29.8787	76			81				ESE. to ENE.	8	Cu S, cl cu	7	Eastward Eastward	b c	9 a. m.	22.92	89
29.7288				82				NE. by E	2	Cu S	9	Nd & Ed	b c	4 p. m.	22.00	81
29.7980				82				NE.	2	Cu S	5	Nd & Ed	b r			
29.8484	79	62		81				NE.	2	Cl, cu S	7	Nd. & Ed.	b c			
29.9581				82				NNE. to NE	2	Cl, cu S, N	7	Nd. & Ed	b c p.			
29.9775				81				NNE. to E.	4	Cu S, N	7	Eastward Eastward	b c q p			
29.8576	77	73		80				NNE. to NE. by E.	2	Cu S, N	9	Nd. & Ed	b c-o q r	9 a. m.	22.63	92
29.9374				80				Variable	2	N	10	0	o q r	4 p. m.	22.53	96
29.9675				80				Calm		N, cu S.	8	Ed. & Ed	o r-b c			
29.9074	77	81		82				E by N to NE	2	Cl cu, cu S	8	Nd. & Ed. Nd. & Ed	b c	9 a. m.	22.70	81
29.9576				81				NE to E by N	3	Cu S, N	9	Eastward Eastward	o p q			
29.9581				80				ENE	2	Cu S, N	9	Nd & Ed	o q r			
29.9476	73	79		81				ENE. to NE. by E	2	Cu S, cl.	9	Nd & Ed Eastward	b c q-o q	9 a. m.	20.72	74
29.9476				81			58	E. by S	2							
29.9476				81			0	E. by N to E. by S.	4	Cu S, N	5	Eastward	o q r			
29.9476				80				E. by N., E.	4	N	10	Eastward	o q r.			
29.9476	76	81		81				E by N, ENE.	2	N, cu S.	9	Eastward	o q r-b c			
29.9476				81				ENE	2	Cu S.	8	Eastward	b c	4 p. m.	22.82	89
29.9476				81				ENE. to ESE.	2	N	8	Eastward	b c p.	9 a. m.	22.93	92
29.9476	76	79		81				E. by S. to E. by N		Cu S, N	9	Eastward	b c q p.	4 p. m.	21.96	88

Abstract log of the United States surveying brig Dolphin, Lieut

Date.	Latitude.	Longitude.	Surface currents.				Under currents.			Vari- tion.
			From vessel.		From boat.		Depth.	Direction.	Knots per hour.	
			Direction.	Knots per hour.	Direction.	Knots per hour.				
1852. May.	North. " "	West. " "							West.	
21, 8 p. m.	4 7 2 ⊙ m.	47 55 1 ⊙ p. m. ....	.....	.....	.....	.....	.....	.....	1 35 ⊙
22, 4 a. m.	4 16 18 " m.	47 48 18 " a. m. ....	.....	.....	.....	.....	.....	.....	.....
8½ a. m.	4 25 0	47 41 0 .....	.....	.....	.....	.....	.....	.....	1 34 ⊙
noon.	4 39 31 ⊙	47 43 15 ⊙ a. m.	N. 89° W.	1.8	.....	.....	.....	.....	.....
8 p. m.	5 13 29 " m.	47 56 11 " a. m. ....	.....	.....	.....	.....	.....	.....	.....
23, 4 a. m.	5 51 37 " m.	48 2 6 " a. m. ....	.....	.....	.....	.....	.....	.....	.....
noon.	6 37 48 "	47 53 36 ⊙	N. 86° W.	0.8	.....	.....	.....	.....	.....
4 p. m.	6 43 0	47 47 0 .....	.....	.....	.....	.....	.....	.....	2 50 ⊙
8 p. m.	7 2 25 ⊙ m.	47 45 29 ⊙ p. m. ....	.....	.....	.....	.....	.....	.....	.....
24, 4 a. m.	7 34 31 " m.	47 51 14 " a. m. ....	.....	.....	.....	.....	.....	.....	.....
9 a. m.	7 57 43 " m.	47 51 24 " a. m. ....	.....	.....	.....	.....	.....	.....	.....
noon.	8 8 24 " m.	47 54 18 ⊙	N. 55° W.	0.9	.....	.....	.....	.....	.....
4½ p. m.	8 17 0	47 57 0 .....	.....	.....	.....	.....	.....	.....	3 27 ⊙
8 p. m.	8 39 34 ⊙ p. m.	48 6 21 * p. m. ....	.....	.....	.....	.....	.....	.....	.....
25, 4 a. m.	8 39 43 ⊙ m.	47 59 47 ⊙ a. m. ....	.....	.....	.....	.....	.....	.....	.....
noon.	8 53 25 "	47 49 7 ⊙	West.	0.6	.....	.....	.....	.....	.....
8 p. m.	9 33 59 " m.	47 35 54 * p. m. ....	.....	.....	.....	.....	.....	.....	.....
26, 4 a. m.	10 31 25 * a. m.	47 41 16 ⊙ a. m. ....	.....	.....	.....	.....	.....	.....	.....
5.30 a. m.	10 33 18 " a. m.	47 40 0 " a. m. ....	.....	.....	.....	.....	.....	.....	.....
noon.	10 52 39 ⊙	47 38 30 ⊙	N. 51° W.	1.0	.....	.....	.....	.....	.....
8 p. m.	11 11 42 ⊙ p. m.	47 37 48 " p. m. ....	.....	.....	.....	.....	.....	.....	3 56 ⊙
8 p. m.	11 46 3 ⊙ p. m.	47 42 48 * * p. m. ....	.....	.....	.....	.....	.....	.....	.....
27, 4 a. m.	12 42 4 ⊙ m.	47 49 25 ⊙ a. m. ....	.....	.....	.....	.....	.....	.....	.....
noon.	13 49 8 "	48 6 11 ⊙	N. 67° W.	0.9	.....	.....	.....	.....	.....
4½ p. m.	14 24 0	48 26 0 .....	.....	.....	.....	.....	.....	.....	5 0 ⊙
8 p. m.	14 51 31 ⊙ m.	48 38 9 ⊙ p. m. ....	.....	.....	.....	.....	.....	.....	.....
28, 4 a. m.	14 49 49 " m.	48 53 36 " a. m. ....	.....	.....	.....	.....	.....	.....	.....
noon.	14 43 18 "	48 53 30 ⊙	West.	0.7	.....	.....	.....	.....	.....
1.45 p. m.	15 0 15 " m.	48 53 30 ⊙ .....	.....	.....	.....	.....	.....	.....	.....
4 p. m.	15 0 0	49 4 0 .....	.....	.....	.....	.....	.....	.....	4 25 ⊙
8 p. m.	15 23 57 ⊙ m.	49 8 29 * p. m. ....	.....	.....	.....	.....	.....	.....	.....
29, 4 a. m.	15 59 29 * a. m.	49 13 52 ⊙ a. m. ....	.....	.....	.....	.....	.....	.....	.....
noon.	16 4 19 ⊙	49 29 53 ⊙	West.	0.8	.....	.....	.....	.....	.....
8 p. m.	15 55 40 ⊙ m.	49 34 2 " p. m. ....	.....	.....	.....	.....	.....	.....	.....
4.25 p. m.	15 51 50 " m.	49 34 36 " p. m. ....	.....	.....	.....	.....	.....	.....	.....
5.40 p. m.	15 51 50 " m.	49 40 2 " p. m. ....	.....	.....	.....	.....	.....	.....	.....

Phillips Lee, United States navy, commander—Continued.

Lat. N.	Temp., water.		Transparency fathoms.	Deep sea soundings.	Winds.	Clouds.			Force of vapor, and relative humidity.			
	Surface.	Under surface.			Direction per compass.	Force.	Class.	Direction from.	Weather.	Hour.	Force of vapor.	Humidity.
75	81				NNE. to East	3 Cu S, N	9	Eastward	b c p q.			
	81				E. to NE by E	3 Cu S, N	8	Eastward	b c p q.			
75	80				ENE. to NE by N	3 Cu S, N	9	Eastward	o p q.	9 a. m.	22.82	91
	81				NE. by E. to NE by N	4 Cu S, N	10	Eastward	o q r.	4 p. m.	22.93	92
	80				E by N, ENE	4 Cu S, N	8	Eastward	b c p q.			
75	80				ENE. to E. by E	4 Cu S, N	10	Eastward	o q r.	9 a. m.	21.65	84
	80				E by N to SE by E	2 Cu S, N	8	Eastward	b c q p.			
	80				E. by N.	2 Cu S.	7	Eastward	b c q.			
	80	74 100 70 900 67 845		1970	NE.	8				9 a. m.	22.70	81
	81			0	E. to NE.	3 Cl cu, cu S, N	9	Eastward	b c q p.			
										4 p. m.	22.93	92
	80				E. by N. to NE by E	2 Cl cu, cu S	8	Eastward	b c q.			
	80				NE by E, ENE	3 Cu S, N	9	Eastward	b c p q.			
								Ed. & Ed.				
80	80				NE. to ENE	4 Cu S, cl cu			b c.	9 a. m.	22.81	84
	80				E. to E by N	4 Cl cu, cu S, N		Nd. & Ed. Eastward	b c p q.			
	81				E. to E. by N	4 Cu S, N	8	Eastward	b c p q.			
	80	76 900 72 845		0	East	4				9 a. m.	21.60	77
80	80			300	E. to ENE.	4 Cu S, cl cu, N	7	Nd. & Ed. Eastward	b c p.			
	80			0	E. by N	4		Eastward		4 p. m.	21.69	77
				1555								
	79				E. by N	4 Cu S, cl S.	8	Eastward	b c.			
	79				E. by N	5 Cu S, N.	8	Eastward	b c p q.			
	78				E. by N	5 Cu S, N.	9	Eastward	o-b c p q	9 a. m.	22.27	92
	78				E. by N., E.	5 Cl S, cu S.	8	Eastward	b c m.	4 p. m.	22.81	84
	78				East	5 Cu S, N.	8	Eastward	b c m-q p.			
	78				East	5 Cu S, cl S.	5	Eastward	b c.	9 a. m.	21.65	84
	79	78 100 77 900 76 845		0	E. by N	5						
				250						4 p. m.	21.84	81
	78				E. by N, ENE	5 Cu	5	Nd. & Ed.	b c.			
	78				E. by N	5 Cu	5	Nd. & Ed.	b c.			
77	78	77 900 76 845		0	ENE.	5 Cu, cu S, N	8	Eastward	b c q p.	9 a. m.	20.84	80
	78			500								
	78			0	East.	5				4 p. m.	20.90	84
				540								
	78			0	East.	5						
				560								

Abstract log of the United States surveying brig Dolphin, Lieut

Date.	Latitude.	Longitude.	Surface current.				Vari- tion.		
			From vessel.		From boat.			Under currents.	
			Direction.	Knots per hour.	Direction.	Knots per hour.			Depth.
1852. May	North.	West.						Mag.	
29, 5.50 p. m.	15 56 10 @ m.	49 39 20 @ p. m.							
5 p. m.	15 56 10 " m.	49 49 28 " p. m.							
30, 4 a. m.	15 28 6 " m.	50 29 5 " a. m.							
5 15 a. m.	15 16 5 " m.	50 34 33 " a. m.							
noon.	14 45 37 " .	51 1 37 @ a. m. p. m.		0.5	N 55° W				
4 45 p. m.	14 20 48 " m.	51 24 51 " p. m.							
8 p. m.	14 11 8 " m.	51 37 24 @ p. m.							
31, 4 a. m.	13 35 8 " m.	52 30 0 * a. m.							
5 a. m.	13 28 25 " m.	52 26 40 " a. m.						1 16 @	
noon.	13 4 42 " .	52 44 23 @ a. m. p. m.		0.5	N, 25° W.				
3 p. m.	12 47 30 " m.	52 57 52 " p. m.							
6 p. m.	12 40 45 " m.	53 18 5 @ p. m.							
June.									
1, 4 a. m.	12 5 20 * a. m.	53 40 19 * a. m.							
noon.	11 46 20 @ .	53 34 1 @ a. m. p. m.		0.5	N, 59° W.				
3 30 p. m.	11 47 14 " m.	53 49 56 " p. m.						6 44 @	
6 p. m.	11 54 40 " m.	53 55 22 * p. m.							
2, 4 a. m.	12 21 15 * a. m.	54 1 16 * a. m.							
6.15 a. m.	12 21 25 " a. m.	54 7 4 " a. m.						1 38 @	
noon.	12 21 24 @ .	54 29 21 @ a. m. p. m.		0.6	N, 77° W				
2.45 p. m.	12 20 17 " m.	54 49 55 " p. m.							
3 p. m.	12 21 54 " m.	55 9 24 " p. m.							
2, 4 a. m.	13 19 29 " m.	54 56 69 @ a. m.							
noon.	14 10 25 " .	54 46 21 @ a. m. p. m.		0.6	N, 10° W				
2.40 p. m.	14 14 " @ m.	54 45 45 @ a. m. p. m.							
3.30 p. m.	14 24 0 .	54 42 0 .						1 30	
4 a. m.	14 54 1 * p. m.	54 39 32 @ p. m.							

Samuel Phillips Lee, United States navy, commander—Continued.

Day.	Temp., air.		Temp., water.				Transparency fathoms.	Deep sea soundings.	Winds.		Clouds.			Force of vapor, and relative humidity.			
	Marine.		Under surface.						Direction per compass.	Force.	Class.	Portion.	Direction from.	Weather.	Hour.	Force of vapor.	Humidity.
	6 a. m.	9 p. m.	Surface.	Temperature.	Depth.												
20.10.75			79				0	East.	5								
20.10.75			79				504	NE., East.	5	Cu, cu s	5	Eastward.	b c m q.				
20.10.75			79					E. by N., E.	5	Cu, cu s, N	5	Eastward.	b c—q p.				
20.11.75			79	77 78 79 80	10 20 30 45	10	0	East.	4					9 a. m.	20.64	80	
20.16.75	73	79	79				500	East.	5	Cu s, N	9	Eastward.	b c q p.				
20.16.75			79	77 78 79 80	10 20 30 45	18	0	E. by S.	4					4 p. m.	21.84	81	
20.16.75			79					E. by S., ESE.	4	Cu s.	9	Eastward.	b c.				
20.17.75			79					E. by N.	4	Cu, cu s.	5	Eastward.	b c m.				
20.17.75			79	75 76 77 78	10 20 30 45	14	0	E. by N.	8					9 a. m.	21.84	81	
20.22.75	81	79	79				1960	E. by N.	4	Cu.	4	Eastward.	b c.				
20.26.75			79	75 76 77 78	10 20 30 45	16	2790	East.	4					4 p. m.	21.84	81	
20.26.75			79				0	E., E. by N.	4	Cu, cu s.	6	Eastward.	b c.				
20.27.75			79					E. by N., E.	4	Cu s, cu.	6	Eastward.	b c.				
20.27.75			79					E., E. by N.	4	Cu s, cu, ci.	7	Eastward.	b c.	9 a. m.	21.68	77	
20.27.75	77	83	79	79 80 81	10 20 30 45	13	0	NE. by N.	8								
20.27.75			79				1000	NE. by N.	8	Cu.	7	Eastward.	b c.				
20.27.75			79					E. by N., E.	8	Cu, cu s.	6	Eastward.	b c m.				
20.28.75			79	78 79 80 81	10 20 30 45		0	East.	8					9 a. m.	21.68	77	
20.28.75	77	84	81				1000	East.	8	Cu, ci.	6	Eastward.	b c.				
20.28.75			81	79 80 81	10 20 30 45		2570	East.	8					4 p. m.	21.84	81	
20.28.75			81				0	East.	4	Cu, cu s.	6	Eastward.	b c m.				
20.28.75			81					East.	5	Cl, cu s, N	6	Eastward.	b c m p.				
20.28.75	79	85	79					E. by N.	4	Cl cu, cu s.			b c.	9 a. m.	21.84	81	
20.28.75			81	79 80 81	10 20 30 45		0	E. by N.	4		7						
20.28.75			81				345	E. by N.	4								
20.28.75			81					E. by N.	4	Cu s, ci cu.	7	Eastward.	b c m.	4 p. m.	21.84	81	
20.28.75			81					E. by N.	4	Cu s, ci cu.	7	Eastward.	b c m.				

Abstract log of the United States surveying brig Dolphin, Lieut.

Date.	Latitude.	Longitude.	Surface current.				Under currents.		Variation.	
			From vessel.		From boat.		Depth.	Direction.		Knots per hour.
			Direction.	Knots per hour.	Direction.	Knots per hour.				
1852. June.	North.	West.							West.	
4, 4 a. m.	15 32 47 ☉ m.	54 38 55 ☾ a. m.								
10 a. m.	15 25 7 " m.	55 1 28 ☉ a. m.								
noon.	15 26 16 "	55 4 48 ☉ — a. m.	N. 60° W..	0.6						
4½ p. m.	15 28 0	55 30 0							2 10	
8 p. m.	15 37 4 * p. m.	55 52 36 * p. m.								
5, 4 a. m.	15 52 9 " a. m.	56 40 14 ☾ a. m.								
5 a. m.	15 53 39 " a. m.	56 45 39 ☾ a. m.							1 25 ☉	
noon.	16 2 50 ☉	57 20 33 ☉ — a. m.	N. 81° W..	0.2						
8 p. m.	16 15 42 * p. m.	58 6 19 * p. m.								
6, 4 a. m.	16 40 6 ☉ m.	58 5 11 ☾ a. m.								
5 a. m.	16 43 22 " m.	58 5 59 ☾ a. m.								
noon.	16 50 54 "	58 33 41 ☉ — a. m.	S. 76° W..	0.6						
4 p. m.	16 43 22 " m.	58 54 34 ☉ p. m.								
8 p. m.	16 50 8 * p. m.	58 57 25 " p. m.								
7, 4 a. m.	16 37 52 " a. m.	58 50 58 * a. m.								
7½ a. m.	16 27 0	58 44 0							0 19 ☉	
noon.	16 44 11 ☉	58 45 27 ☉ — a. m.	West	0.5						
4.10 p. m.	16 42 11 " m.	59 6 28 " p. m.							1 01 ☉	
8 p. m.	16 41 58 * p. m.	59 20 54 * p. m.								
8, 4 a. m.	17 39 32 ☾ * a. m.	59 29 4 * a. m.								
8 a. m.	18 9 0	59 29 0							0 49 ☉	
noon.	18 38 18 ☉	59 30 50 ☉ — a. m.	N. 88° W..	0.7						
4 p. m.	19 2 36 " m.	59 33 20 " p. m.								
8 p. m.	19 7 52 * p. m.	59 33 51 ** p. m.								
9, 4 a. m.	19 53 59 ☾ * a. m.	59 33 18 ☉ a. m.								
7 a. m.	20 12 30 ☾ * a. m.	59 38 52 " a. m.								
noon.	20 43 57 ☉	59 38 2 ☉ — a. m.	N. 44° W..	0.7						
4 p. m.	21 13 44 ☉ m.	59 36 10 " p. m.							2 43	

Samuel Phillips Lee, United States navy, commander—Continued.

Baro- meter.	Temp., air.		Temp., water.		Transparency fathoms.	Deep sea soundings.	Winds.		Clouds.		Weather	Force of vapor, and relative humidity.				
	Mast- head.		Surface.	Under surface.			Direction per compass.	Force.	Class.	Portion.		Direction from.	Hour.	Force of vapor.	Humidity.	
	Deck.	6 a. m.		3 p. m.												Temperature.	Depth.
30.06 80				78			E. by N.	4	Cu S, cu ..	7	Eastward..	b c m.				
30.10 85				79	79 10 78 80 76 200 78 845	10	East.	4					9 a. m.	21.84	81	
30.20 85	77	82	79				East.	4	Cu S.	7	Eastward..	b c m.				
30.04 82			79				East.	4	Cu, cu S ..	7	Eastward..	b c m.	4 p. m.	21.84	81	
30.00 81			80				East.	4	Cu.	5	Eastward..	b c m.				
30.07 80			79	79 10 72 80 69 200 64 845	18	0	East.	4					9 a. m.	22.00	81	
30.06 56	77	83	80				E. by N.	4	Cu, cu S ..	7	Eastward..	b c m.				
30.05 83			79				East.	8	Cu, cu S ..	5	Eastward..	b c.	4 p. m.	20.97	77	
29.91 80			78				E., E. by N..	4	Cu, cu S ..	5	Eastward..	b c.				
30.00 80			79	78 10 76 80 74 200 73 845		0	E. by N.	4					9 a. m.	20.97	77	
30.05 86	79	82	79				E. by N.	8	Cu, cu S ..	6	Eastward..	b c.				
30.00 85			80	79 10 76 80 74 200 70 845		0	E. by N.	4					4 p. m.	20.41	70	
30.04 82			80				E. by N.	4	Cu S, cu ..	4	Eastward..	b c.				
30.06 80			79				E. by N., E..	4	Cu S, cu ..	4	Eastward..	b c.				
30.01 83	78	82	79				E., ENE.	8	Cu, cu S ..	6	Eastward..	b c.				
30.04 85			80	79 10 77 80 75 800 74 845	17	0	East.	8					4 p. m.	20.72	74	
30.01 84			79				E. by N., E..	8	Cu, cu S ..	6	Eastward..	b c.				
29.99 80			79				ENE.	4	Cu, cu S ..	5	Eastward..	b c q.	9 a. m.	19.38	73	
30.02 86	79	83	79				ENE.	4	Cu S, cu ..	4	Eastward..	b c.				
30.02 84			79	79 10 77 80 74 200 71 845		0	ENE.	8					4 p. m.	20.33	77	
30.03 82			79				ENE., NE. by E.	8	Cu, cu S ..	5	Eastward..	b c.				
30.00 60			79				ENE, E by N.	4	Cu S, N.	6	Nd. & Ed. Nd. & Ed.	b c q p.				
30.04 83			79	75 200		0	ENE.	4					9 a. m.	19.65	76	
30.00 84	79	81	79				ENE, E by N.	4	Cl cu, cu S.	8	Eastward..	b c q.				
30.04 86			79	79 10 75 80 73 200 71 845		0	E. by N.	4								

Abstract log of the United States surveying brig Dolphin, Lieut.

Date.	Latitude.	Longitude.	Surface currents.				Under currents.			Variation.
			From vessel.		From boat.					
			Direction.	Knots per hour.	Direction.	Knots per hour.	Depth.	Direction.	Knots per hour.	
1852. June.	North.	West.								West.
9, 8 p. m.	21 29 47 ☉ m.	59 81 30 * p. m.								
10, 4 a. m.	22 28 9 ☾ * a. m.	59 82 21 * a. m.								
7.15 a. m.	22 38 59 " a. m.	59 26 9 ☉ a. m.								
noon.	23 0 34 ☉ a. m.	59 26 10 ☉ p. m.	N. 57° W.	0.7						
5.25 p. m.	23 35 33 " m.	59 25 9 " p. m.								
8 p. m.	23 43 31 * p. m.	59 35 36 ** p. m.								
11, 4 a. m.	24 33 34 ☾ a. m.	59 47 59 ☉ a. m.								
4.45 a. m.	24 36 43 " a. m.	59 49 19 " a. m.								
7¼ a. m.	24 46 0 a. m.	59 54 0 p. m.								8 0 ☉
noon.	25 11 21 ☉ a. m.	59 59 43 ☉ p. m.	West.....	1.1						
6.15 p. m.	25 45 13 " m.	60 6 43 " p. m.								6 2 ☉
8 p. m.	25 52 13 " m.	60 9 12 " p. m.								
12, 4 a. m.	26 27 36 D. R.	60 7 45 ☾ a. m.								
5.10 a. m.	26 32 21 " a. m.	60 6 51 " p. m.								
noon.	26 22 5 " a. m.	60 3 39 ☉ p. m.	N. 77° W..	0.5						
4¾ p. m.	26 5 0 a. m.	60 2 0 p. m.								6 10 ☉
8 p. m.	25 33 49 * p. m.	60 4 54 ☉ p. m.								
13, 4 a. m.	25 0 56 " a. m.	60 29 43 ☾ a. m.								
noon.	24 36 42 ☉ a. m.	60 44 57 ☉ p. m.	N. 77° W.	0.5						
4¾ p. m.	24 16 0 a. m.	60 56 0 p. m.								5 37 ☉
8 p. m.	24 8 13 * p. m.	61 4 6 * p. m.								
14, 4 a. m.	24 13 9 ☉ m.	61 12 3 ☾ a. m.								
noon.	24 19 39 " a. m.	61 40 8 ☉ p. m.	N. 47° W.	0.5						
3.28 p. m.	24 11 S " m.	61 43 31 " p. m.			NE. by E.	1.0				8 32 ☉
7.10 p. m.	24 18 1 * p. m.	61 44 8 * p. m.								
8 p. m.	24 13 24 " p. m.	61 50 0 " p. m.								
15, 4 a. m.	24 27 14 ☉ m.	62 43 56 D. R.								
8.30 a. m.	24 27 20 " m.	62 55 14 " p. m.								
noon.	24 27 40 " a. m.	63 3 27 ☉ p. m.	N. 10° E..	0.5						
8.26 p. m.	24 23 18 " m.	63 29 45 " p. m.								

Phillips Lee, United States navy, commander—Continued.

Lat. and Long.	Temp., water.		Transparency fathoms.	Deep sea soundings.	Winds.		Clouds.		Weather	Force of vapor, and relative humidity		
	Surface.	Under surface.			Direction per compass.	Force.	Class.	Portion.		Direction from.	Hour.	Force of vapor.	Humidity.
79	79				E. by N., E	4	Cu S.	8 Eastward.	b c q.			
78	78				E. to ENE	5	Cu S, N	7 Eastward.	b c q.			
75	77 76 76	10 80 200		0 900 0	East....	4				9 a.m.	19.88	74
80	79			858 0	E., E. by N.	4	Cu	8 Eastward.	b c q.			
79	78 71 72	10 80 200		800	ENE....	5				4 p.m.	20.83	77
78					E by N, ENE	5	Cl, cu S.	8 Eastward.	b c q.			
78					NE. by E....	5	Cu, cu S.	6 Nd & Ed.	b c q.			
78	77 76 78 71	10 80 900 845		0 584 0	NE. by E.	6						
51	78			0	NE. by E., E. by N	5	Cu S, cl cu.	7 Nd & Ed Eastward.	b c q.	4 p.m.	20.00	80
77	78	200		520 0	E. by N....	5				4 p.m.	22.21	84
77				506	E. by N.	6	Cl, cu S, N	8 Eastward.	b c q p.			
76					E. by N, SE. by E.	5	Cu S....	10 Nd, & Ed Ed & Ed	b c q p.			
76	76 78 72 70	10 80 200 842		8520 0	E. by N	8				9 a.m.	21.57	92
76	76				Variable	2	Cl cu, cu S	9 Ed & Ed. Eastward	b c q p.			
76					W., ENE.	5	N, cu, cu S	9 Variable Nd & Ed	b c q p.	4 p.m.	21.28	96
76					ENE	5	Cu S, N	8 Eastward.	b c q.			
77	78				ENE	5	Cu S	7 Eastward	b c.	9 a.m.	20.80	88
76					E. to SE.	4	Cu S, N	8 Eastward	b c q p.	4 p.m.	20.95	84
77					SE. by S, SE.	5	Cu, cu S.	6 Eastward	b c.			
77	77				SE., SE. by S.	5	Cu, cu S.	7 Ed. & Ed	b c.	9 a.m.	20.92	84
79	79 79 79 76	10 80 200 845		8450 0 0	Variable	3						
78				850	East	3				4 p.m.	20.95	84
78					Variable, E. ESE, SE	5	Cu S Cu S	8 Eastward. 4 Eastward.	b c b c.			
78	76 71 69 68	10 80 200 845	9	0 450	NW by N	2				9 a.m.	22.78	100
78	77				Variable	2	N	10 Ed. & Ed	b c p.			
78	77 75 79 70	10 80 200 845	13	0 1000	SE.	4			b c p.			

Abstract log of the United States surveying brig Dolphin, Lie

Date.	Latitude.	Longitude.	Surface current.				Under currents.			Variation.
			From vessel.		From boat.		Depth.	Direction.	Knots per hour.	
			Direction.	Knots per hour.	Direction.	Knots per hour.				
1852. June.	South.	West.								W.
15, 8 p. m.	24 32 19 ○ m...	63 43 37 ○ p. m.								
16, 4 a. m.	24 36 26 " m...	64 25 21 " a. m.								
noon.....	24 34 1 "	64 24 36 ○	N. 4° E...	0.8						2 15
8 p. m.	24 33 56 " m...	64 42 33 * p. m.								
17, 4 a. m.	24 35 20 * a. m.	64 56 4 * a. m.								
7½ a. m.	24 38 0	65 8 0								2 17
noon.....	24 32 3 ○	65 13 33 ○	N. 43° W.	0.8						
5.30 p. m.	24 33 46 " m...	65 31 58 " p. m.			WSW	0.8				
8 p. m.	24 34 0 " m...	65 30 25 " p. m.								
18, 4 a. m.	24 47 56 * a. m.	65 22 14 * a. m.								
noon.....	24 43 20 " a. m.	65 15 49 ○	N. 17° W..	0.9						
	○ p. m.									
8 p. m.	24 44 28 ○ p. m.	65 20 49 " p. m.								2 26
19, 4 a. m.	24 57 52 * a. m.	65 14 12 * a. m.								
noon.....	25 1 34 ○	64 43 17 ○	N. 11° W.	1.0						
8 p. m.	24 55 32 * p. m.	64 59 27 * p. m.								
20, 4 a. m.	24 41 23 " a. m.	65 16 54 * a. m.								
9 a. m.	24 36 46 " a. m.	65 12 18 ○ * a. m.			NW. by N.	1.0				
noon.....	24 39 40 ○	65 12 48 " a. m.	N. 25° W.	0.7						
7 p. m.	24 34 10 " m...	65 10 16 " a. m.								2 24
8 p. m.	24 35 0 " m...	65 11 22 " a. m.								
21, 4 a. m.	25 3 19 " m...	65 55 42 ○ a. m.								
7½ a. m.	25 8 0	66 18 0								0 24
noon.....	25 18 19 ○	66 52 20 ○ a. m.	N. 6° W..	1.5						
0.40 p. m.	25 14 13 " m...	66 57 12 " a. m.								
8 p. m.	25 32 9 " m...	67 1 3 " a. m.								
22, 4 a. m.	25 44 56 " m...	67 4 13 " a. m.								
noon.....	26 17 34 "	67 23 49 ○	N. 77° E..	0.7						
		p. m.								
3 p. m.	26 32 33 " m...	67 33 7 " p. m.								
8 p. m.	26 48 0 * p. m.	67 35 7 * p. m.								
23, 4 a. m.	27 19 12 " a. m.	68 4 26 * a. m.								
1.25 a. m.	27 21 24 " a. m.	68 6 3 " a. m.			WSW	0.6	10 SW	0.8	2	
							20 SW	1.2		

Phillips Lee, United States navy, commander—Continued.

st. id.	air. Temp., water.		Transparency fathoms.	Deep sea soundings.	Winds.		Clouds.			Weather	Force of vapor, and relative humidity.		
	Surface.	Under surface.			Direction per compass.	Force.	Class.	Portion.	Direction from.		Hour.	Force of vapor.	Humidity.
9 p. m.		Temperature.	Depth.										
	78				SE.....	4	Cu S, N...	9	Sd. & Ed.	b c p q .			
	76				South.....	5	Cu S, N...	8	Sd. & Wd.	b c q p..			
80	78				S. to SSW...	3	Cu S, cl...	7	Southward	b c.....			
	79				SSW.....	2	Cu S, N...	8	Southward	b c p ...	4 p. m.	20.95	84
	79				S by W to SE.	3	Cu	5	Southward	b c.....			
									Sd. & Ed.	b c.....	9 a. m.	22.81	84
83	79			0	Calm, SE....	2	Cu	5	Sd. & Ed.	b c.....			
	50	77	200	1000	ESE.....	2					4 p. m.	22.00	81
	80				SSE, ESE....	2	Cu	7	Sd. & Ed.	b c.....			
	79				SE to SE by E	3	Cu S, N...	9	Sd. & Ed.	o q p l..			
76	78				SSE, va'ble.	2	Cu, cu S, N	9	Sd. & Ed.	b c—o p q t l	9 a. m.	20.00	80
	79				S. by E to SE.	2	Cu S, cu ..	8	Southward	b c.....			
	79				S. to SSE....	3	Cu S, cu ..	6	Sd. & Ed.	b c.....			
81	80				SE. by S. to S. by E.....	3	Cu, cu S ..	8	Sd. & Ed.	b c.....	9 a. m.	21.65	84
	79				SSE.....	2	Cl cu, cu ..	7	Southward	b c.....	4 p. m.	21.96	88
	79				SSE.....	2	Cu, cu S, N	7	Southward	b c l't p.			
	80	73 10 76 80 75 200 72 845		8560	SE. by E....	2					9 a. m.	22.27	92
				0									
79	80				ESE, to S. by E.....	2	Cu S, N...	3	Southward	b c l t q.			
	79			0	South.....	3					4 p. m.	22.31	84
	79			1100	SSE. to S. by W.....	3	Cu S.....	9	Southward	b c.....			
	79				SW. by S. to SW.....	3	Cu S.....	6	Southward	b c.....			
	79				SSW.....	4	Cu, cu S..	7	Sd. & Wd.	b c q...	9 a. m.	21.34	81
	79	79 10 77 80 71 200 69 845		0	S. by W. ½ W.	4							
				2350									
	80				S. to N. by way of W.	3	Cu S, N...		Sd. & Wd.	b c p q..			
	79				SSW., W by S	3	Cu S, cu ..	7	Nd. & Wd. Sd. & Wd.	b c m l..			
73	79				SSW.....	3	Cu, cu S ..	4	Sd. & Wd.	b c m...	9 a. m.	20.95	84
	78	78 10 75 80 72 200 68 845		0	W. by S.....	2							
				1000									
	77				W. by S. to SSW.....	3	Cu S, N...	9	Westward. Sd. & Wd.	b c p q..	4 p. m.	20.95	84
	77				SW	3	Cu, cu S..	5	Southward	b c m...			
		77 10 78 80 74 200 70 845		0	SW	2			Sd. & Wd.	b c m...			
	77			16	SW	2					9 a. m.	20.95	84
				1000									

Abstract log of the United States surveying brig Dolphin, Lieut.

Date.	Latitude	Longitude.	Surface currents.		Under currents		
			From vessel		From boat.		
			Direction	Knots per hour	Direction.	Knots per hour.	Variation.
	North.	West.					West.
1859. June.							
23, noon.	27 57 53	68 9 57	N. 53° E.	0.8			
4½ p. m.	27 55 0	68 22 0					3 47
8 p. m.	29 8 5 *	68 27 14					
24, 4 a. m.	29 25 59	68 50 39 *					
8.45 a. m.	28 56 12	69 4 8			NE	0.8	10 NE 0.6 80 ENE 1.2
noon.	29 8 30	69 4 51	N. 12° W	0.8			
8 p. m.	29 47 15	69 32 10					
25, 4 a. m.	30 31 48	70 5 24 *					
5.10 a. m.	30 33 38	70 10 4					2 16
noon.	31 12 4	70 26 50	N. 4° E	0.8			
6 p. m.	31 56 0	70 59 48					
8 p. m.	32 4 0	71 8 20					
26, 4 a. m.	32 16 33	71 33 30 D. R.					
noon.	32 49 13	72 1 38					
2.45 p. m.	33 8 10	72 14 8					
7.20 p. m.	33 23 55	72 31 14					
8 p. m.	33 23 28	72 31 36					
27, 4 a. m.	34 2 52 D. R.	73 6 38					
noon	34 33 14 *	73 45 42 *					
8 p. m.	35 24 31	73 41 16 *					
midnight	35 47 45	73 39 54					
28, 4 a. m.	35 51 3	73 39 0					
noon.	36 0 0	73 51 37	N. 84° E	0.5			
4.40 p. m.	36 4 21	73 59 9	East.	0.8			10 NE 0.8 50 NE 1.2

Samuel Phillips Lee, United States navy, commander—Continued.

Barometer.	Temp., air.		Temp., water.			Transparency fathoms.	Deep sea soundings.	Winds.		Clouds.			Weather	Force of vapor, and relative humidity.		
	Mast-head.		Under surface.		Direction per compass.			Force.	Class.	Portion.	Direction from.	Hour.		Force of vapor.	Humidity.	
	Deck.	6 a. m.	8 p. m.	Surface.												Temperature.	Depth.
30.06 53		76	82	78				SW., SSW...	8	Cu, cu S ..	5	Sd. & Wd.	b c m...			
30.10 50				79				SSW...	8	Cu	5	Sd. & Wd.	b c m...	4 p. m.	22.31	84
30.02 79				78				S., S. by W...	8	Cu, cu S ..	8	Southward	b c m...			
30.10 54				79	79 10 75 90 15 74 200 14 b. 70 845		0 1000	S. by W	3					9 a. m.	22.31	84
30.10 54	72	79		79				S. by W., S.	8	Cu	4	Southward	b c m...			
30.04 50				75				SW. by W., SW.	4	Cu S, cu ..	4	Sd. & Wd.	b c	4 p. m.	20.95	84
30.04 77				78				SW	4	Cu S, cu ..	2	Sd. & Wd.	b c			
30.04 76				78	74 10 72 80 70 200 69 845	14	0 600	SW	4					9 a. m.	21.96	88
30.02 90	74	77		75				SW., WSW..	4	Cu S, ci S.	3	Sd. & Wd.	b c m...			
29.96 75				75	74 10 71 80 71 200 69 845		0 345	SW. by W...	5					4 p. m.	22.93	92
30.00 75				75				SW. by W...	5	Ci cu, cu S	8	Sd. & Wd.	b c m...			
30.05 70				74	78 10 69 80 70 200 69 845		0 345	SW. by W., NNW.	5	Ci, cu S, N	9	Sd. & Wd. Nd. & Ed.	o q l r.			
30.15 78	66	69		72				NE.....	5	Cu S, N...	10	Nd. & Ed.	o p q...			
30.12 78				78	78 10 68 80 66 200 67 845		0 345	NE. by E....	4							
30.04 72				72				ENE	4					4 p. m.	16.16	89
30.04 71				72	66 50 64 100			NE. to E. by N.	4	Ci S, cu S, N	10	Nd. & Ed. Southward	o p m...			
30.05 70				74	78 10 69 80 67 200 67 845	14	0 700	East.....	4	Ci S, cu S, N	10	Westward. Sd. & Ed.	o p			
30.04 74	68			78	76 10 72 80 72 200			East.....	4	Cu S, N...	10	Sd. & Ed.	o m p...	9 a. m.	17.88	91
29.95 72				80	79 10 76 25 78 80 74 200			E. by N.....	4	Cu S, N...	10	Eastward..	o p g...	4 p. m.	20.27	81
29.94 73				72	71 10 65 80 61 200		0 200	SSW	4							
29.90 72				72				Variable....	2	Cu S.....	7	Eastward.	b c			
29.07 75	68	71		70				N. by E. to NNW.	2	Cu S, ci S.	6	Nd. & Wd. Eastward . Nd. & Ed.	b c	9 a. m.	19.04	91
29.93 73				70	69 10 61 25 58 80 56 200 56 845	10	1460 0	N. by E.....	1					4 p. m.	19.84	87

Abstract log of the United States surveying brig Dolphin, Lieut

Date.	Latitude.	Longitude.	Surface current.				Under currents.		Vari- ation.
			From vessel.		From boat.		Depth.	Direction.	
			Direction.	Knots per hour.	Direction.	Knots per hour.			
1853. June.	North. " "	West. " "							Mag.
28, 8 p. m.	36 9 58 * p. m.	73 59 9 * p. m.							
29, 4 a. m.	36 23 34 ☉ m.	74 36 43 ☉ a. m.							
noon	36 59 41 " ..	74 29 29 ☉ a. m.	West	0 8					
8 p. m	37 35 34 * p. m.	74 27 58 " p. m.							
30, 4 a. m	38 6 13 ☉ m.	74 13 33 " a. m.							
7½ a. m.	38 14 0 ..	74 15 0 ..							4 21 0
noon..	38 34 56 ☉ ..	74 6 41 ☉ ..							
9 p. m.	39 22 10 " m ..	73 59 1 " p. m.							

Samuel Phillips Lee, United States navy, commander—Continued.

Day	Temp., air.		Temp., water.		Transparency fathoms.	Deep sea soundings.	Winds.		Clouds.		Weather	Force of vapor, and relative humidity.					
	Decl.	Mast-head.		Surface.			Under surface.		Direction per compass.	Force.		Class.	Portion.	Direction from.	Hour.	Force of vapor.	Humidity.
		Lat. N.	Long. W.				Temperature.	Depth.									
2.5.73				70			N. to NE	1	Cl S, cu S.	8	Northward	b c . .					
2.6.73				68			NE to SW	2	Cl. cu S.	5	Sd. & Wd. Sd. & Ed	b c m l					
2.7.73	67	69		65			E., ESE.	3	Cu S . . .	10	Sd & Ed. o m	9 a. m.	16.75	91			
2.8.73				69			NE. to SE.	3	Cu S.	10	Northward	e m . .	4 p. m.	17.02	87		
2.9.73				67			S. to SSW., WNW.	2	Cu S, cl cu	9	Eastward	b c m l					
2.10.73				69			WNW, SSW.	2	Cu S, cl S.	8	Eastward	b c f m . .	9 a. m.	16.16	89		
2.11.73				67			S. by W.	3	Cu S, cu	8	Southward	b c m . .					

INSTRUCTIONS.

NAVY DEPARTMENT, *July 7, 1851.*

SIR: The object of the service for which the *Dolphin* is fitting, is for "testing new routes, and perfecting the discoveries made by Lieutenant Maury in the course of his investigations of the winds and currents of the ocean," as per act of Congress, approved March 3, 1849.

This is an important service, and one that requires patient, attentive, and laborious observations.

The department has selected you to command on this occasion, on account of its high appreciation of your qualifications and fitness for the work to be done; it is expected, therefore, that you, as well as the other officers of the *Dolphin*, will bestow upon the duty which has been assigned you the utmost diligence and the most assiduous attention.

The subjects of observation which will command your particular attention are:

1st. The force and direction of the winds; the hourly state of the weather, and all the meteorological conditions connected therewith, as thermal, dynamical, barometrical, and the like.

2d. The force and set of currents, their depth and width, their temperature, and the position of their edges or limits.

3d. Hourly observations upon the temperature of the surface water.

4th. Frequent observations upon the temperature of the ocean at various depths.

5th. Deep-sea soundings.

6th. Vigias, and all dangers about which there are doubts either as to existence or position.

7th. Transparency and saltness, or the specific gravity of sea water in the different parts of the ocean.

You will keep an abstract of your log as per form. It is believed that the form itself is sufficiently explicit as to what is wanted for the abstract, a copy of which you will send through this department to Lieutenant Maury as often as opportunities offer, and retain the original to be sent to his office when you shall return from the service assigned you.

You will make it a rule, the better to ascertain rate of currents and to fix their limits, to determine by observation the variation of the compass and your position in the forenoon, in the afternoon, and at night, as well as at noon whenever the weather will permit; and after allowing for leeway, heave of the sea, variation of the compass, and false steerage, you will call the difference between the place of the vessel, as established by observation, and as established by *dead reckoning*, current, and so enter it in the abstract.

You will also try in calms, and as often as convenient, both the surface

and under currents in the usual way, by lowering boats, letting down weights, &c.

For longitude by chronometer at night the largest of the fixed stars are the best objects to be observed when the horizon is good. The meridian altitude of the moon may be used for latitude at night, or in the fore or after noon, according to its age.

Note in its proper column, not only the portion of cloudy sky—10 being entirely overcast and 0 clear—but state also the direction or directions in which, and the estimated rate at which, the clouds are moving, with the kinds of clouds, as nimb., cum., cirrus., stratus, &c.

In taking temperature of surface water, a fresh bucket should be drawn up each time, the thermometer plunged into it immediately, held there for several minutes, and *read while the bulb is in the water.*

For the purpose of ascertaining the existence of under-currents, you will sound at intervals, at the least, of every fifty miles when you are in the vicinity of the Gulf stream, with 100 or 200 fathoms of line, according to circumstances, attaching to the line two thermometers, one near the lead and the other midway down. In case you have no thermometers suitable, or should lose them, then you will attach two hollow non-conducting cylinders with valves opening upwards in the place of the thermometers, haul the line up briskly, and try quickly the temperature of the water brought up in the cylinders.

In case you should find an under-current, you will endeavor to ascertain its limits and set with all the accuracy possible. For rate and direction, a block of wood, or a breaker loaded just to sinking, and suspended at any required depth by a small float just sufficient to keep it from sinking further, will perhaps be the best means.

The determination of the rate and set of under-currents is an operation which is so modified by the weather and other circumstances, that it must of necessity be left, in a great measure, to the judgment and mental resources of the operators. You and your officers will, perhaps, have abundant opportunity to display your ingenuity in regard to the subject. The lead used in sounding for temperatures should be painted white, and the distance at which it disappears going down, and re-appears coming up, should be entered in fathoms in the transparency column.

The Dolphin will be provided with the means of sounding at great depths. It is desirable to reach the bottom at every attempt, for the depth of the ocean is an important element towards a perfect understanding of the tides, their laws of motion, the course and form of the tidal wave, and the like.

For further information upon this subject you are referred to the superintendent of the National Observatory; he will present you with a chart showing the deep-sea soundings of the Albany, John Adams, and Taney, and communicate to you all the information touching the matter that will be serviceable.

He will also point out to you a remarkable region of cold water lying in the usual track of vessels trading between New York and England. It is very desirable to know the depth of the water in this cold region, its degree of saltness, the character of the bottom, and the like. It is supposed to be quite shoal.

The following is a list of the principal among the doubtful danger which disfigure the best charts of the Atlantic ocean. You will remove all doubt from as many as come in your way:

	Latitude.			Longitude.		
	North.			West.		
	°	'	"	°	'	"
Castro's shoal, June 30, 1841.....	40	45	0	35	48	0
Ramigeau's vigia (doubtful).....	42	45	0	37	25	0
Shoal (1798).....	43	34	0	37	29	0
Vigia (1750).....	43	57	0	34	4	0
Jacquet I.; seen in 1789.....	46	56	0	39	29	0
Lion bank.....	56	42	0	17	30	0
Rock, 1803, 1831.....	41	24	0	41	38	0
Shoal, 1798, 1803.....	40	21	0	42	50	0
Rock, 21 feet.....	46	30	0	49	44	0
Hervagault's breakers; years seen, 1723, 1816, 1827.....	41	3	0	49	19	0
Virgin rocks.....	46	27	0	50	55	0
Daraith's rock (very doubtful).....	40	49	0	54	50	0
Watson's rock, even with the water.....	40	25	0	53	34	0
Cleveland bank (doubtful).....	30	48	0	10	29	0
The Eight stones.....	34	40	0	16	40	0
Do.....	34	20	0	16	40	0
Salvages islands.....	30	10	0	15	55	0
Piton rocks.....	30	4	0	16	3	0
Shoal.....	23	18	0	17	40	0
Cesar's breakers.....	1	54	0	22	14	0
French shoal, 1796; even with water.....	3	0	0	20	35	0
Warley's shoal, 1813; 7 fathoms.....	5	5	0	21	13	0
Jean Hamon's bank (doubtful).....	36	50	0	19	50	0
Kramer's bank; position very uncertain.....	59	55	0	16	32	0
Aitkin's rock; supposed position, sought for, but not found, by Captain Vidal, 1831.....	55	22	0	10	40	0
Vigia (very doubtful).....	55	26	0	24	45	0
Vigia (doubtful).....	44	40	0	10	20	0
Mayda (very doubtful).....	46	12	0	19	37	0
The Five Heads (very doubtful).....	44	11	0	19	23	0
Three Chimneys.....	47	57	0	29	36	0
Barenethy's rock (uncertain.....	45	45	0	37	24	0
Devil's rock (high).....	50	10	0	16	0	0
Perseus' shoal; plainly seen in 1813.....	41	7	0	22	39	0
Amplimont rocks; latitude observed.....	42	36	0	24	7	0
Greeve's reef, 1811; about two feet above water.....	44	15	0	25	10	0
Negres rocks.....	48	10	0	20	59	0
Mariner rocks.....	45	59	0	29	15	0
Isle Verd or Green rock.....	44	51	0	26	12	0
Rocks seen by Captains Gough and Birch.....	40	33	0	33	0	0
Whale rock (position uncertain).....	40	29	0	32	50	0
St. Mary's bank, 1819.....	37	40	0	25	5	0
Kutusoff bank, 1816.....	36	0	0	27	16	0
Chantereau's vigia (very doubtful).....	34	53	0	28	32	0
Princess Elizabeth shoal, 1828.....	38	19	0	39	19	0
Bank, 46 fathoms Captain Walker, 1830.....	38	19	0	39	50	0
Penedo de San Pedro.....	5	0	0	27	45	0
Coral reef.....	0	50	0	29	15	0
Longchamps (very uncertain).....	0	28	0	29	30	0
Texeiros, 1810.....	9	50	0	30	5	0
Maelstrom of the Dutch (doubtful).....	12	0	0	33	35	0
Breton's rock.....	16	0	0	37	4	0
Mourand's bank, 1773.....	39	40	0	41	29	0
Coral reef, 10 feet.....	24	42	0	65	10	0
Galleon's rock, 1730 (doubtful).....	5	1	0	41	13	0
Galleoniere's, or Fonsoca I.; seen in 1822.....	15	51	0	49	30	0
St. Esprit reef; very dangerous, 1817; (doubtful).....	12	21	0	54	45	0
Martin's reef.....	14	43	0	58	55	0
	16	46	0	58	32	0

* Refer to Wind and Current Chart, North Atlantic, series A, for further information.

After having searched for the doubtful rocks and dangers on the European route, you will then return in a southwesterly direction, passing through the Sargasso sea, sounding as you go, and clearing up doubts on your way as to vigias, until you reach the Gulf stream, between the parallels of 30° and 35° N.; you will then turn about and make the best of your way to the French shoal of the list, sighting the Cape de Verde islands, and removing doubts as to all the vigias near your path.

Having searched for "French and Warley's shoals," and satisfied yourself, after careful examination, as to the existence of the former, you will then pass as far south as 7° , making a zigzag line of soundings between the meridians of 15° and 25° west longitude.

This is a region remarkable for oceanic disturbances and tide rips; is thought to be volcanic. Returning to the equator, you will proceed thence to make Cape St. Roque, and you will occupy yourself assiduously with constant observations and soundings between the island of Fernando de Noronha and the Main.

There is reason to believe that the current, which is said to exist here, which is so much dreaded by mariners, and which adds many delays to the passages of vessels, either has no permanent existence, or if existing that it is not dangerous.

You will therefore occupy a month, if necessary, in exploring it and the currents thence to the mouth of the Amazon; having done this, touch at Para for water.

It is supposed that this service will occupy you for five or six months, during which time the stores, provisions, and water of the Dolphin may require to be replenished; when and where is left to your discretion, as the route prescribed will take you near to several places where it can conveniently be done. If necessary you can touch at Porto Praya, where there is a naval depot for our squadron on the coast of Africa. It is desirable that you should keep at sea as much possible during your absence.

Having satisfied yourself as to the St. Roque and great equatorial currents athwart the mouth of the Amazon, and giving a few days at Para to your officers and men for refreshment, you will proceed homewards by the following route:

From the equator in longitude 37° W., draw a straight line to Cape Charles; this line will lie nearly in the middle of a strip of the ocean, about 300 miles broad, and remarkable for the temperature of its water. You will sail a zigzag course through this strip, crossing it at least four times on your way home, and passing the line which you are directed to draw, at least two hundred miles on either side, and taking deep-sea soundings before you put about to recross it again. Should you discover anything remarkable as to the depth of the sea within this region, you will push the discovery to a conclusion.

It is expected that the provisions, &c., which you may get at Porto Praya or elsewhere will last you home.

In a service which is controlled so much as this in which you are out to be engaged by circumstances of wind and weather, much must necessarily be left to the discretion of those to whom it is entrusted. You are fully aware of the objects and the importance of the

service, and the department relies with confidence upon the exercise of a sound discretion upon your part.

Wishing you success and a safe return,

I am, very respectfully, your obedient servant,

WILL. A. GRAHAM

Lieutenant SAMUEL PHILLIPS LEE, *U. S. Navy,*

Appointed to command the U. S. brig Dolphin, New York.

No. of reel.	No. of fathoms.	Net weight. Pounds.	Dry line.				Wet line.			
			No. of tests.	Average strength.	Greatest strength.	Least strength.	No. of tests.	Average strength.	Greatest strength.	Least strength.
1	9,525	107	14	75	88	58				
2	9,575	107	14	88 $\frac{1}{2}$	102	73				
3	9,600	106	7	72 $\frac{1}{2}$	76	67				
4	9,925	109	7	62 $\frac{1}{2}$	71	56				
5	9,800	109 $\frac{1}{2}$	7	78 $\frac{1}{2}$	85	66				
6	10,000	114	14	76 $\frac{1}{2}$	86	68				
7	9,500	109 $\frac{1}{2}$	14	67 $\frac{1}{2}$	94	52				
8	9,025	104 $\frac{1}{2}$	19	72 $\frac{1}{2}$	106	55				
9	11,125	101 $\frac{1}{2}$	21	65 $\frac{1}{2}$	80 $\frac{1}{2}$	52				
10	11,625	108	21	70	80	55				
11	10,475	102	18	55	64	38				
12	10,075	109 $\frac{1}{2}$	14	60	68	50				
13	10,000	108	17	52	95	37	11	86	127	52 $\frac{1}{2}$
14	9,460	106 $\frac{1}{2}$	21	58 3-10	64	46 $\frac{1}{2}$	14	97	105	87
15	11,750	110	10	78	96	55	10	115 7-10	135	89
16	10,000	111	20	61	73	41 $\frac{1}{2}$	12	92	99	83
17	10,370	110	7	58	65	55				
18	9,200	102	14	70	75	63	14	94	121	86 $\frac{1}{2}$
19	11,750	111	7	70	75	63	7	114	116	105
20	11,400	109	10	55 $\frac{1}{2}$	63	48	10	75	88	64
Total.....	204,180	2,153 $\frac{3}{4}$	276	1,346	1,606	1,099	78	673 7-10	791	567
Average ..	10,209	107 7-10	.....	67 $\frac{1}{2}$	80 3-10	55 3-10	.....	96	113	81

Line triple the size of the foregoing.

No. of reel.	No. of fathoms.	Net weight. Pounds.	No. of tests.	Average strength.	Greatest strength.	Real strength.
1	5,420	156	14	130	147	106
2	5,025	152	18	151	152	105
Total.....	10,445	308	32	281	299	211
Average ..	5,222½	154	.....	140½	149½	105½

REMARKS.

This small line, furnished by the contractors, was to have been of the size and strength and smoothness of two reels of 10,000 fathoms each, left by the Congress, made of unbleached flax shoe-thread, and which we had, making in all of fishing line about 225,000 fathoms. (The weakest spot in the line is the value of the whole length employed in the cast.) This line was required to sustain at least 75 pounds to the fathom in the air, but it fell far short of this standard. Shrinkage found by trial to be 8 per cent. The reel alone weighs 5 and 6 pounds for 10,000 fathoms of single size, and 10 pounds for 5,000 fathoms of triple size. Some of the small line was of better strength for not being laid up so hard, which agrees with what the ropemakers say, and Greer's Mechanic's Dictionary implies the same thing. The flax thread used would be weakened if bleached, which it was, and it probably was boiled.

Description of sounding line required to be prepared against the return of the Dolphin in 1852, and which was ready for my successor, Lieutenant Commanding O. H. Berryman.

The line should measure 10,000 fathoms to the 100 pounds, to be made of the best flax shoe-thread, unbleached, without any sizing whatever, without knots or splices, of equal size and strength throughout, to bear a weight in the air of at least 75 pounds upon each cut length of a fathom of dry line; to be delivered in good order in 10,000 fathoms length, reeled on strong reels of hard wood, with a small iron plate at each end, (fitted for an inch-square shaft;) each reel of line to be put in a bag of stout canvas, painted and tied up Triple strength line should measure 10,000 fathoms to 300 pounds, and sustain a weight of at least 225 pounds; the other particulars the same as the above. When inspecting and marking the line,* pass it round hard smooth pegs, on plank plates secured to the smooth floor of a long dry loft (free of spittle) in the navy yard, and at a convenient distance apart, (say 25 fathoms, where four lengths will make just 100 fathoms,) and mark it according to the printed directions of the bureau, and distinctly, using a needle and saddler's silk; besides which, each 100 fathoms should be marked with a very small piece of red bunting, as the silk marks, though useful to show the quantity, are not seen plainly as required for marking the intervals when running. Each reel should be numbered and marked with the name of the petty officer who inspected, measured, and marked the line; the number of fathoms of line; its strength, found by pouring musket balls gently into a bucket suspended by a fathom of the line made fast by a rolling bend; the net weight of the line, and whether the first hundred fathom mark is on the inside or outside of the reel. The master should duly record these particulars.

* 1853.—A much more convenient method of examining and marking the line is to use the small mounted board wheel, (with a circumference of a fathom when scooped to hold the line, and which has a small spring attached to it to click at every turn, so that the account is easily kept in measuring,) invented by Passed Midshipman James Higgins, U. S. navy, attached to the U. S. ship John Adams. When the Dolphin was at Porto Praya, Commander Barron of the John Adams kindly gave us one of these simple and excellent machines, and I cannot sufficiently thank him and Mr. Higgins for the good it did.

TABLE OF SOUNDINGS

IN

THE ATLANTIC OCEAN,

BY

THE OFFICERS OF THE UNITED STATES SURVEYING BRIG DOLPHIN,

LIEUTENANT S. PHILLIPS LEE, U. S. NAVY, COMMANDING.

Table of soundings in the Atlantic Ocean by the officers of the United States surveying brig Dolphin, Lieutenant S. Phillips Lee,
U. S. Navy, commanding.

Date.	Latitude.	Longitude west of Greenwich.		Temperature.		Force of wind.	State of sea.	No. of 32-lb. shot, or weight of lead.	What sounded from.	Name of officer of boat, &c.	Whole time of sounding.	Depth of cast, up and down, in fathoms.	Remarks.
		North.	West.	Air.	Water.						h. m. s.		
1851.													
Oct. 10	39 13 19	⊙ m....	72 1 38	⊙ 69	⊙ 65	3	.....	56	Brig.	.....	.....	0 200	Deep sea line.....
	38 53 11	" m....	71 47 8	71	66	4	.....	56	..do.	.....	.....	0 200	.....do.....
11	37 39 51	D. R....	70 57 0	71	75	5	.....	56	..do.	.....	.....	0 250	.....do.....
14	38 27 0	⊙ m....	66 42 0	73	72	2	Rough.....	56	..do.	.....	.....	0 250	.....do.....
15	38 14 16	"	66 42 35	68	74	3	....do.....	56	..do.	.....	.....	0 300	.....do.....
16	37 33 0	" m....	66 57 15	68	76	3	Very rough..	56	..do.	.....	.....	0 420	.....do.....
17	37 53 30	" m....	66 48 5	60	76	4	Rough.....	56	..do.	.....	.....	0 400	.....do.....
	38 7 0	" m....	66 46 36	63	75	4	....do.....	56	..do.	.....	.....	0 430	.....do.....
	38 6 24	* p. m.	67 8 0	61	75	4	....do.....	56	..do.	.....	.....	0 400	.....do.....

18	38	9	0	D.	R....	67	31	0	D.	R....	67	71	....	Heavy.....	56	..do.....	.....	.....	0 400	.....do.....
20	37	44	0	⊙	.....	65	20	30	⊙	p. m.	72	75	6	Large.....	56	..do.....	.....	.....	0 320	.....do.....
21	36	58	0	"	m....	66	12	28	"	p. m.	72	73	2	....do.....	1	..do.....	.....	.....	0 500	.....do.....
22	37	19	53	"	m....	65	51	0	"	a. m.	69	73	2	Moderate.....	.....	..do.....	.....	.....	0 400	Deep sea line.....
	37	26	5	"	.....	65	48	16	"	a. m. p. m.	78	73	2	....do.....	3	Boat. Lee.....	31 56	.....	0 1175	Small fish line.....
	37	30	35	"	m....	65	59	44	"	p. m.	73	73	2	....do.....	.....	..do.....	.....	.....	0 500	.....do.....
25	35	52	6	"	m....	65	56	12	"	p. m.	71	73	4	....do.....	1	..do.....	24 18	.....	0 1000	.....do.....
Nov. 2	32	46	0	"	m....	59	56	20	"	p. m.	72	74	2	....do.....	2	..do.. Hall.....	9 52	.....	0 800	.....do.....
6	32	46	0	"	m....	60	5	8	"	p. m.	75	72	3	High.....	2	.....	.....	.....	0 550	.....do.....
13	32	6	0	"	m....	58	40	52	"	p. m.	65	73	2	....do.....	56	Brig.....	.....	.....	0 400	Deep sea line.....
14	32	10	16	"	m....	58	9	35	"	a. m.	70	72	8	....do.....	56	..do.....	.....	.....	0 300	.....do.....
15	31	17	0	"	m....	53	21	55	"	p. m.	67	70	5	Rough.....	2	..do.....	.....	.....	0 500	.....do.....
17	31	3	43	"	m....	50	6	34	"	p. m.	69	71	5	.....	56	..do.....	.....	.....	0 400	.....do.....

29	24	23	40	"	m.....	33	54	40	"	a. m. — p. m.	76	75	4	High.....	56	Brig.....	0 400	Deep sea line.....
30	23	42	12	"	m.....	32	39	0	"	a. m.	72	73	1	Good.....	1	Boat. Lee.....	1 21 6	2180 0	Small fish line.....	
	23	41	12	"	m.....	32	39	5	"	a. m. — p. m.	75	77	1	....do.....	2	..do...do.....	59 10	2200 0	.....do.....
Dec. 1	23	15	3	"	m.....	32	24	32	"	p. m.	79	75	1	....do.....	2	..do.. Hall.....	1 1 4	2200 0	.....do.....
3	24	8	0	"	m.....	32	7	12	"	p. m.	75	75	3	Moderate....	56	Brig.....	.....	0 400	Deep sea line.....
5	21	27	20	"	m.....	29	9	12	"	p. m.	76	75	5	....do.....	56	..do...do.....	.....	0 400	.....do.....
6	20	2	54	"	m.....	27	33	30	"	a. m.	73	75	5	....do.....	56	..do...do.....	.....	0 400	.....do.....
7	18	39	26	"	m.....	25	24	16	"	a. m.	76	75	5	Tolerable....	1	Boat. Hall.....	1 7 53	1970 0	Small fish line.....	
	18	19	14	"	m.....	25	5	10	"	p. m.	75	75	5	....do.....	2	..do...do.....	41 6	1675 0	.....do.....
8	17	38	23	"	m.....	23	48	0	"	p. m.	75	75	5	Unfavorable..	56	Brig.....	.....	0 400	Deep sea line.....
10	18	11	23	"	m.....	23	48	28	"	a. m.	73	75	5	Tolerable....	2	Boat. Hall.....	35 58	1612 0	Small fish line.....	
11	17	34	31	"	m.....	22	50	27	"	a. m.	73	75	5	Unfavorable..	2	..do...do.....	28 22	1370 0do.....	
13	16	29	31	"	m.....	20	58	01	"	a. m. — p. m.	80	75	5	Good.....	2	..do...do.....	46 34	1941 0do.....	

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Table of soundings in the Atlantic Ocean—Continued.

Date.	Latitude.	Longitude west of Greenwich.	Temperature.		Force of wind.	State of sea.	No. of 32-lb. shot, or weight of lead.	What sounded from.	Name of officer of boat, &c.	Whole time of sounding.		Depth of cast, up and down, in fathoms.	Remarks.
			Air.	Water.						h. m.	s.		
1852.													
	<i>North.</i>	<i>West.</i>											
	° ' "	° ' "	°	°									
Jan. 19	2 10 10 ☉ m....	19 57 28 ☉ a. m.	82	80	3	Tolerable	32	Boat.	Renshaw.	1 9	3	2750 0	Small fish line.....
	2 10 10 " m....	19 57 28 " a. m.	82	80	3	....do.....	2	..do..	Danels...	1 9	0	2690 0	.....do.....
20	0 23 54 " m....	21 45 0 " p. m.	81	79	4	Unfavorable..	1	..do..	Renshaw.	53	22	0 2000	.....do.....
21	<i>South.</i> 0 34 30 " m....	22 40 18 " a. m.	81	78	4	....do.....	1	..do..	Danels...	1 13	59	0 2125	.....do.....
22	2 27 39 " m....	23 37 58 " a. m.	83	79	4	Tolerable	1	..do..	Renshaw.	1 50	42	3020 0	.....do.....
23	4 6 18 " m....	24 46 45 " a. m.	80	78	4	....do.....	1	..do..	Danels...	1 17	40	0 2215	.....do.....
24	5 42 0 " m....	25 40 30 " a. m.	81	78	4	Good.....	1	..do..	Renshaw.	1 32	37	2970 0	Small fish line, waxed...
25	6 59 42 " m....	25 42 54 " a. m.	80	78	3	Fair.....	1	..do..	Danels...	1 40	6	3250 0	.....do.....
27	4 11 34 " m....	24 0 41 " a. m.	85	79	4	Tolerable	1	..do..	.....do.....	1 48	56	3200 0	.....do.....

REG BRIG DOLPHIN, LIEUT. S. PHILLIPS LEE, U. S. NAVY, COMMANDING.

Weight of each 100 fathoms of unwaxed fishing line.

FATHOMS.															
1600	1650	1700	1750	1800	1850	1900	1950	2000	2050	2100	2150	2200	2250	2300	2350
INTERVALS.															
1600	1650	1700	1750	1800	1850	1900	1950	2000	2050	2100	2150	2200	2250	2300	2350
4 35	4 41	4 43	4 50	4 53	4 57										
4 37	4 05	4 30	4 33	4 46											
4 39	4 21	4 21	4 23												
4 15	4 11	4 34	4 32	4 33	4 38										
4 09	4 16	4 09	4 23	4 34	4 44	4 34	4 49								
4 01	4 09	4 23	4 14	3 44											
4 01	4 19	4 08	4 17												
4 04	4 04	4 14	4 19	4 29	4 45	4 44	4 49	4 50	5 07	5 08					
3 35	4 04	4 08	4 20	4 23	4 29	4 49	4 58	5 05	5 04	5 17	5 15	6 31			
4 03	4 19	4 21	4 39	4 45	4 47	4 49	5 08	5 08	5 08	5 17	5 25	5 49			
3 07	2 33	3 26	3 21	3 39	3 34										
4 09	4 21	4 23	4 23	4 50	4 59	5 09									
2 33	4 08	4 01	4 08	4 03	4 11	4 06	4 15	4 16	5 36	4 21	4 08	4 09	4 30	4 44	4 49
3 50	2 56	4 11	4 16	4 26	4 49	4 49									
2 51															
4 35															
4 35	4 41	4 39	5 23	4 43	5 16										
4 16	4 39	4 39	4 39	5 07											
4 13	4 19	4 35	4 35	4 49	4 54	5 19	5 01	5 11							
13 07	11 43	13 04	13 25	13 40	15 03	13 20	13 50	14 23	15 53	16 03	14 48	16 29	4 30	4 44	4 40
19	17	17	17	15	12	8	6	5	4	4	3	3	1	1	1
4 07	4 13	4 39	4 36	4 31	4 39	4 47	4 48	4 54	5 13	5 01	4 56	5 27	4 30	4 44	4 40
10	6	7	6	5	3	9	1	6	19	— 12	— 5	31	— 57	14	— 4

Table of soundings in the Atlantic Ocean—Continued.

Date.	Latitude.	Longitude west of Greenwich.	Temperature.		Force of wind.	State of sea.	No. of 32-lb. shot, or weight of lead.	What sounded from.	Name of officer of boat, &c.	Whole time of sounding.		Depth of cast, up and down, in fathoms.	Remarks.
			Air.	Water.						h.	m.		
1852		West.											
Feb. 15	South. " 0 23 0 ☉ m....	0 19 9 30 ♀ p. m.	86	79	3	Tolerable....	1	Boat.	Mayo....	41	4	0 1500	Small fish line, waxed....
16	0 22 50 " m....	21 6 32 ☉ p. m.	86	80	3	.....	1	..do..	Hall....	52	9	0 1960	.....do.....
18	1 2 13 " m....	23 17 45 " a. m.	.....	78	3	Rough.....	1	..do..	Renshaw.	47	2	0 1500	.....do.....
	0 57 0 " m....	23 19 34 " p. m.	92	81	2	.....do.....		..do..	.....do.....			0 1100	Triple size line
19	1 50 30 " m....	24 52 6 " p. m.	86	79	3	Favorable....		..do..	.....do.....			0 1100	.....do.....
20	2 46 0 " m....	27 19 0 " p. m.	85	80	3	.....		Brig.	.....			0 100	Deep sea line.....
21	3 15 6 " m....	29 3 34 " a. m.	88	79	3	.....	1	Boat.	.....	32	15	0 1100	Triple size line
22	3 47 54 " m....	31 45 24 ☾ * ♀ p. m.	85	80	2	Moderate....	1	..do..	.....	16	10	0 700	.....do.....
23	4 35 22 D. R....	32 43 35 D. R....	80	79	1	.....do.....	1	..do..	.....	29	50	0 1100	.....do.....

ING BRIG DOLPHIN, LIEUT. S. PHILLIPS LEE, U. S. NAVY, COMMANDING.

List, of each 100 fathoms of warped fishing line.

FATHOMS.																			
2000	2100	2200	2300	2400	2500	2600	2700	2800	2900	3000	3100	3200	3300	3400	3500	3600	3700	3800	
INTERVALS.																			
1. 45	2. 42	3. 34	4. 24	5. 13	6. 01	6. 49	7. 36	8. 21	9. 05	9. 48	10. 30	11. 11	11. 51	12. 30	13. 08	13. 45	14. 21	14. 56	
1. 50	2. 50	4. 07	4. 06	4. 12	4. 06	4. 14	4. 02												
2. 25	3. 44	3. 44	3. 50	3. 56	4. 04	3. 59	4. 18	4. 23	4. 31										
3. 31	3. 37	3. 37	3. 45	3. 46	3. 57	3. 58	4. 00	4. 02	4. 06	4. 13	4. 11	4. 10							
3. 46	4. 11	3. 50	4. 01	4. 07	4. 07	4. 24	4. 26	4. 21	4. 47	4. 35	5. 34	5. 02							
3. 53	3. 55	3. 34	3. 40	3. 39	3. 54	3. 51	3. 49	4. 07	5. 25	4. 08	4. 20	4. 50	4. 39	5. 00	4. 32				
4. 57		4. 24	4. 17	4. 47	4. 40	5. 10	4. 57	5. 00	5. 15	5. 27	6. 45	7. 25	8. 07						
5. 40																			
6. 11																			
7. 02	7. 34	7. 50	8. 06	8. 07	8. 17	8. 00													
8. 30	4. 11	4. 01	4. 03	3. 35	3. 50	4. 02	4. 15	5. 47											
9. 57																			
4. 13	4. 23	4. 33	4. 46	4. 40															
7. 50	3. 51																		
1. 25	3. 44			3. 38															
7. 32	4. 09	3. 55	3. 38	2. 56	3. 53	4. 12	4. 39												
3. 50	3. 05	4. 05	3. 40	5. 27	4. 50	4. 15		4. 20	4. 30										
2. 10	4. 01	4. 00	4. 15	4. 10	4. 20	4. 15	4. 20												
3. 50	3. 39	3. 50	4. 02	4. 07	4. 10														
4. 15	4. 15	4. 25	4. 15	4. 50	4. 41	4. 45	4. 52	5. 00	4. 58	5. 28									
5. 00	3. 52	4. 00	4. 07	4. 11	4. 15	4. 25	4. 26	4. 20	4. 29	4. 34	5. 12	5. 12							
1. 34	4. 00	4. 06	4. 28	4. 16	4. 25	4. 27	4. 40	4. 36	4. 32	4. 35	4. 52	5. 03	5. 15						
2. 44	2. 46	2. 51	3. 38	2. 50	3. 07	3. 07	3. 05	3. 04	3. 09	3. 10	3. 10	3. 10	3. 12	3. 13	3. 20	3. 23	3. 25	3. 34	
3. 45	3. 35	3. 30	3. 46	3. 52	4. 02	4. 03	4. 12	4. 16	4. 24	4. 31	4. 31	4. 36	4. 37	4. 38					
3. 19	3. 20	3. 26	3. 35	3. 35	3. 35	3. 35	3. 40	3. 40	3. 40	3. 40	3. 55	3. 55	4. 00	4. 01	4. 10				
11. 06	77. 06	71. 27	77. 02	69. 02	76. 10	71. 56	07. 25	57. 05	53. 10	44. 12	41. 12	43. 45	45. 30	08. 25	09. 12	02. 3	23. 3	25. 3	
25	21	19	20	21	19	19	16	18	12	10	9	9	6	5	3	1	1	1	
2. 40	3. 41	3. 40	3. 51	3. 54	4. 00	4. 00	4. 18	4. 23	4. 26	4. 25	4. 35	4. 52	5. 01	5. 02	4. 01	3. 28	3. 38	3. 54	
1	1	5	5	3	6	0	13	10	3	-1	10	17	9	1-1.01	-33	5	6	6	

DEEP SEA SOUNDINGS TAKEN FROM THE BOA

Table showing average time of descent of each 100 fathoms

	FATHOMS.											
	300	400	500	600	700	800	900	1000	1100	1200	1300	14
	INTERVALS.											
Line not waxed	m. s. 58 45	m. s. 59 17	m. s. 70 22	m. s. 76 53	m. s. 76 19	m. s. 77 19	m. s. 87 00	m. s. 88 31	m. s. 77 22	m. s. 78 42	m. s. 71 34	m. s. 72 11
Waxed line	m. s. 48 58	m. s. 50 49	m. s. 57 28	m. s. 60 33	m. s. 66 44	m. s. 70 56	m. s. 74 31	m. s. 73 31	m. s. 81 10	m. s. 83 48	m. s. 88 58	m. s. 89 39
Total	96 43	112 59	127 50	137 34	143 03	148 15	161 34	151 02	158 32	162 30	155 05	153 50
Whole number of casts	55	56	57	57	55	54	55	55	56	49	48	4
Average interval for each 100 fathoms	1 45 $\frac{3}{4}$	2 01	2 14	2 25	2 36	2 45	2 58	3 00	3 10	3 19	3 28	3 1
Differences		16	18	11	11	9	11	7	7	9	8	

OF THE U. S. SURVEYING BRIG DOLPHIN—Continued.

of line, from all the casts made with one 32-pound shot.

FATHOMS.															
1600	1650	1700	1750	1800	1850	1900	1950	2000	2050	2100	2150	2200	2250	2300	2350
INTERVALS.															
73 07	71 48	70 24	68 55	67 40	65 58	64 30	62 50	61 28	59 53	58 08	56 48	55 23	54 30	52 44	51 40
65 25	67 00	64 25	62 25	60 58	59 33	57 28	55 37	53 09	51 09	49 10	47 58	46 29	45 05	43 10	41 12
103 43	103 43	103 30	103 17	103 03	102 58	102 47	102 31	102 15	101 49	101 30	101 03	100 55	100 13	99 44	98 58
45	45	44	44	41	37	33	35	25	25	20	21	19	14	13	11
3 39	3 41	3 50	3 54	3 58	3 58	4 00	4 01	4 03	4 07	4 11	4 05	4 35	4 34	4 37	4 25
2	2	3	4	4	1	1	1	2	2	4	—3	17	—1	2	26

Table of soundings in the Atlantic Ocean—Continued.

Date.	Latitude.	Longitude west of Greenwich.	Temperature.		Force of wind.	State of sea.	No. of 32-lb. shot, or weight of lead.	What sounded from.	Name of officer of boat, &c.	Whole time of sounding.		Depth of cast, up and down, in fathoms.	Remarks.
			Air.	Water.						h. m.	s.		
1852.													
May 26	North. 11 11 42 \odot p. m.	West. 47 37 48 \odot p. m.	85	80	4	Unfavorable..	1	Boat.	Danels...	47	55	0 1855	Small fish line, waxed...
28	15 0 15 \odot m....	48 58 30 " a. m. — p. m.	86	79	5	Rough.....	1	Brig.	...do.....	3	53	0 250	Small fish line.....
29	15 55 40 " m....	49 34 2 " p. m.	82	78	5	...do.....	1	..do..	Hall.....	10	19	0 500	.....do.....
	15 51 50 " m....	49 34 36 " p. m.	82	78	5	...do.....	1	..do..	Renshaw.	9	5	0 540	.....do.....
	15 51 50 " m....	49 40 2 " p. m.	80	78	5	...do.....	1	..do..	...do.....	10	36	0 560	.....do.....
	15 56 10 " m....	49 39 20 " p. m.	78	78	5	...do.....	1	..do..	Danels...	10	4	0 500	.....do.....
30	15 16 5 " m....	50 34 33 " a. m.	77	78	4	...do.....	1	..do..	...do.....	12	5	0 500	.....do.....
	14 20 49 " m....	51 24 51 " p. m.	78	78	4	...do.....	1	..do..	Mayo....	10	48	0 564	.....do.....
31	13 28 25 " m....	52 26 40 * a. m.	79	79	3	Tolerable	1	Boat.	Hall.....	4	50	0 1960	.....do.....



ING BRIG DOLPHIN, LIEUT. S PHILLIPS LEE, U. S. NAVY, COMMANDING.

shot, of each 100 fathoms of unwaxed fishing line.

FATHOMS.													
1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	2400	2500	2600
INTERVALS.													
m. s.	m. s.	m. s.	m. s.	m. s.	m. s.	m. s.	m. s.	m. s.	m. s.	m. s.	m. s.	m. s.	m. s.
2 41	3 11	3 03	3 40	3 35									
2 57	3 10	3 12	3 21	3 27	3 29	3 46	3 39	3 47	3 52				
2 06	3 07	3 24	3 22	3 25	3 45	3 39	3 50	3 55					
		3 16	3 21										
2 52	2 37	2 43	3 05										
2 49	2 55	3 00	3 06	3 09	3 17	3 28							
2 46	2 51	3 00											
2 47	2 58	2 57	3 00	3 18	3 10	3 17							
2 39	2 51	2 56	3 00	3 13	3 12	3 24	3 29	3 29	3 36	3 40	3 40	3 57	
1 47	1 43	1 52	1 57	1 56	2 04	2 07	2 10	2 15					
2 41	3 44												
2 32	2 33	2 47	2 43	2 53	3 01	3 03	3 12	3 13	3 17	3 23	3 24	3 34	3 43
29 37	31 50	32 20	30 40	24 46	21 53	22 44	16 20	16 44	10 45	7 03	7 04	7 31	3 43
11	11	11	10	3	7	7	5	5	3	2	2	2	1
2 41	2 54	2 56	3 04	3 06	3 03	3 15	3 16	3 21	3 35	3 31	3 32	3 45	3 43
5	13	2	3	2	2	7	1	5	14	— 4	1	13	— 2

OF THE U. S. SURVEYING BBIG DOLPHIN—Continued.

shot, of each 100 fathoms of waxed fishing line.

FATHOMS.													
1200	1400	1600	1800	1700	1900	1900	2000	2100	2200	2300	2400	2500	2600
INTERVALS.													
1 26	2 41	2 50	2 45	2 51	2 53	3 00	3 06	3 08	3 10	3 13	3 25	3 26	3 30
2 30	2 35	2 44	2 42	2 49	2 45	2 58	.....	.....	.....	.....	.....	.....	.....
3 05	5 14	5 34	5 27	5 34	5 40	5 58	3 05	3 08	3 10	3 13	3 25	3 26	3 30
1 34	2 37	2 47	2 43	2 47	2 50	2 59	3 05	3 08	3 10	3 13	3 25	3 26	3 30
5	3	10	5	4	3	9	7	3	2	3	13	1	4

from all the casts made with two 32-pound shot.

1200	1400	1600	1800	1900	2000	2100	2200	2300	2400	2500	2600	2700	2800
29 27	31 04	32 30	30 40	34 46	31 56	29 44	16 20	16 44	10 45	7 05	7 04	7 31	3 43
3 00	5 14	5 34	5 27	5 34	5 40	5 58	3 05	3 08	3 10	3 13	3 25	3 26	3 30
14 45	37 04	37 54	36 07	39 39	37 58	29 42	19 15	19 59	13 55	10 16	10 29	10 57	7 18
13	13	13	13	10	11	9	6	6	4	3	3	3	2
2 40	3 51	2 55	3 00	3 02	3 04	3 11	3 14	3 19	3 29	3 25	3 29	3 39	3 36
3	11	4	5	3	2	7	3	5	10	— 4	5	3	— 3

DEEP SEA SOUNDINGS TAKEN FROM THE BOATS OF THE U. S. SURVEY

Table showing time of descent with one 32-pound

Date	FATHOMS.																	
	300	400	500	600	700	800	900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	
	INTERVALS																	
1852	mi. s.	mi. s.	mi. s.	mi. s.	mi. s.	mi. s.	mi. s.	mi. s.	mi. s.	mi. s.	mi. s.	mi. s.	mi. s.	mi. s.	mi. s.	mi. s.	mi. s.	
Jan. 15	1 27	1 41	1 44	1 14	1 48	1 53	1 55	2 08	2 07	2 08	2 15	2 20	2 23	2 30	2 27	2 33	2 38	
18	1 41	1 51	2 08	2 11	2 28	2 34	2 41	2 41	2 52	2 59	3 10	3 15	3 23	3 23	3 25	3 33	3 38	
24	1 35	1 49	1 59	2 14	2 16	2 27	2 30	2 41	2 47	2 55	3 05	3 12	3 15	3 18	3 22	3 26	3 30	
25	1 37	1 48	1 52	1 58	2 20	2 14	2 21	1 58	2 29	2 43	2 52	2 50	3 06	3 11	3 17	3 17	3 21	
27	1 40	2 00	2 06	2 13	2 22	2 30	2 38	2 47	2 55	2 55	3 12	3 12	3 16	3 25	3 31	3 37	3 40	
29	1 50	1 59	2 12	2 14	2 45	3 22	2 59	2 45	2 57	3 02	3 14	3 17	3 18	3 14	3 25	3 29	3 32	
31	1 45	2 09	2 31	2 43	3 00	3 12	3 17	3 30	3 38	3 46	3 55	3 44	4 16	4 13	4 24	4 28	4 34	
Feb. 3	1 45	1 59	2 15	2 19	2 26	2 40	2 52	2 56	3 02	3 10	3 12	3 14	3 25	3 15	3 23	3 19	3 25	
4	1 39	1 55	2 07	2 16	2 35	2 39	2 47	3 19	3 02	2 45	2 54	3 01	3 06	3 10	3 33	3 56	4 03	
5	1 16	1 25	1 33	1 34	1 42	1 44	1 50	1 59	2 07	2 07	2 13	2 20	2 21	2 26	2 37	2 47	2 45	
12	1 47	2 05	3 15	2 39	2 29	2 38	2 53	2 55	3 10	3 10	3 16	3 30	3 30	3 32	3 30	3 48	4 25	
16	1 33	1 54	2 05	1 29	2 25	2 33	2 42	2 55	3 00	3 04	3 13	3 19	3 19	3 31	3 30	3 33	3 42	
22	1 39	1 57	2 10	2 19	2 25	2 43	2 49	2 59	3 07	3 15	3 27	3 40	3 46	3 47	4 00	4 07	4 13	
Mar. 13	1 43	1 53	2 06	2 17	2 29	2 26	2 47	2 50	3 07	3 07	3 11	3 24	3 33	3 30	3 30	3 42	4 02	
28	1 35	1 49	2 00	2 08	2 14	2 35	2 32	2 37	2 45	2 59	3 12	3 11	3 16	3 14	3 14	3 36	3 46	
31	2 07	2 23	2 39	2 46	2 56	3 06	3 13	3 14	3 20	3 27	3 36	3 58	4 05	3 44	3 51	4 05	4 11	
April 9	1 42	1 56	2 11	2 16	2 38	2 43	2 42	2 13	2 57	3 05	3 05	3 07	3 47	3 52	3 49	3 35	3 42	
May 24	1 37	1 43	2 11	2 21	2 28	2 30	2 53	2 57	3 05	3 08	3 20	3 22	3 34	3 38	3 51	3 50	3 45	
26	1 30	1 45	1 55	2 07	2 11	2 24	2 35	2 40	2 53	3 11	3 06	3 19	3 14	3 15	3 20	3 35	3 45	
31	1 35	1 55	2 10	2 20	2 30	2 35	3 00	3 05	3 15	3 17	3 25	3 35	3 40	3 50	4 45	4 08	3 50	
June 2	1 44	1 52	2 05	2 18	2 30	2 35	2 49	2 49	2 52	2 57	3 09	3 20	3 15	3 27	3 36	3 46	3 54	
4	1 42	2 07	2 03	2 10	3 37	2 30	3 52	3 09	3 20	3 24	3 33	3 45	3 44	3 49	4 06	4 19	4 06	
6	1 41	1 55	2 04	2 15	2 25	2 33	2 38	2 47	2 52	3 00	3 05	3 20	3 19	3 26	3 33	3 38	3 45	
8	1 45	2 00	2 12	2 20	2 28	2 42	2 52	2 55	3 06	3 15	3 20	3 20	3 35	3 36	3 42	3 50	3 54	
12	1 41	1 49	1 51	1 55	2 02	2 10	2 14	2 26	2 32	2 32	2 34	2 43	2 36	2 45	2 41	2 44	2 44	
14	1 19	1 23	1 40	1 48	1 53	2 02	2 20	2 28	2 32	2 50	2 50	2 56	3 01	3 02	3 08	3 36	3 30	
20	1 31	1 49	1 50	2 01	2 13	2 20	2 21	2 35	2 35	2 45	2 56	2 53	3 59	3 02	3 05	3 06	3 15	
23	1 52	2 07	2 15	2 23	2 33	2 40	2 48	2 51	3 02	3 06	3 06	3 06	3 06	3 06	3 06	3 06	3 06	
Total	42 58 50	42 57	28 60	32 06	44 70	56 74	81 78	21 51	10 34	45 33	53 33	11 33	35 37	00 34	54 36	23 34	54	
No. of casts	20	27	23	25	23	25	25	27	23	24	27	26	26	24	27	27	26	
Av. interval for each 100 fathoms	1 39	1 53	2 08	2 10	2 28	2 32	2 40	2 44	2 54	2 59	3 06	3 12	3 17	3 21	3 31	3 34	3 38	
Differences	14	10	7	18	9	8	11	5	7	6	5	4	10	8	8	8	8	

THE BRIG DOLPHIN, LIEUT. S. PHILLIPS LEE, U. S. NAVY, COMMANDING.

wt. of each 100 fathoms of waxed fishing line.

FATHOMS.																			
1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	2400	2500	2600	2700	2800	2900	3000
INTERVALS.																			
lb. s. oz. c.	lb. s. oz. c.	lb. s. oz. c.	lb. s. oz. c.	lb. s. oz. c.	lb. s. oz. c.	lb. s. oz. c.	lb. s. oz. c.	lb. s. oz. c.	lb. s. oz. c.	lb. s. oz. c.	lb. s. oz. c.	lb. s. oz. c.	lb. s. oz. c.	lb. s. oz. c.	lb. s. oz. c.	lb. s. oz. c.	lb. s. oz. c.	lb. s. oz. c.	lb. s. oz. c.
3 45	3 43	3 34	3 26	3 51	3 41	3 37	3 12												
3 39	3 50	4 37	4 08	4 27	4 05	4 14	4 32												
3 15	3 43	3 44	3 30	3 54	4 04	3 59	4 18	4 22	4 21										
3 31	3 37	3 37	3 45	3 44	3 37	3 58	4 00	4 02	4 00	4 18	4 11	4 10							
4 54	4 11	3 39	4 01	4 07	4 07	4 34	4 36	4 21	4 47	4 35	5 34	5 52							
3 33	3 33	3 34	3 40	3 35	3 34	3 31	3 48	4 07	5 25	4 06	4 20	4 59	4 39	5 09	4 32				
4 27		4 24	4 17	4 47	4 49	5 10	4 57	5 00	5 18	5 27	6 48	7 25	8 07						
2 49																			
4 11																			
2 52	2 38	2 50	3 06	3 07	3 17	2 50													
3 23	4 11	4 01	4 08	3 35	3 39	4 02	4 15	5 47											
3 52																			
4 13	4 23	4 33	4 46	4 40															
3 50	3 51																		
3 25	3 34		3 35																
3 32	4 03	3 55	3 33	3 56	3 58	4 12	4 39												
3 56	3 03	4 05	3 40	5 27	4 50	4 15	4 20	4 30											
3 59	4 01	4 00	4 15	4 10	4 20	4 15	4 20												
3 56	3 33	3 50	4 02	4 07	4 10														
4 15	4 15	4 25	3 15	4 59	4 41	4 45	4 52	5 00	4 50	5 28									
3 49	3 52	4 00	4 07	4 11	4 15	4 25	4 26	4 29	4 29	4 34	5 12	5 12							
3 54	4 00	4 06	4 23	4 16	4 25	4 27	4 40	4 30	4 32	4 35	4 52	5 03	6 15						
2 44	2 46	2 51	2 53	2 59	3 07	3 07	3 05	3 04	3 09	3 10	3 10	3 10	3 12	3 19	3 20	3 24	3 24	3 34	
3 35	3 36	3 39	3 46	3 53	4 02	4 08	4 12	4 16	4 24	4 31	4 31	4 36	4 37	4 39					
3 19	3 20	3 26	3 25	3 25	3 35	3 35	3 40	3 40	3 40	3 40	3 55	3 55	4 00	4 01	4 20				
31 36	77	26	71	27	77	03	82	02	76	10	71	56	67	24	57	45	53	10	44
25	21	19	20	21	19	18	16	13	12	10	9	9	6	5	3	1	1	1	
3 49	3 41	3 46	3 51	3 54	4 00	4 00	4 13	4 23	4 26	4 25	4 35	4 52	5 01	5 02	4 01	3 28	3 28	3 34	
1	1	5	5	8	6	0	13	10	9	-1	10	17	9	1	-1.01	-38	3	6	

DEEP SEA SOUNDINGS TAKEN FROM THE BOATS

Table showing average time of descent of each 100 fathoms

	FATHOMS.											
	300	400	500	600	700	800	900	1000	1100	1200	1300	1400
	INTERVALS.											
Line not waxed	m. s. 58 45	m. s. 62 17	m. s. 70 22	m. s. 76 52	m. s. 76 16	m. s. 77 19	m. s. 87 05	m. s. 88 31	m. s. 77 22	m. s. 78 42	m. s. 71 14	m. s. 71 01
Waxed line.....	42 58	50 42	57 28	60 32	66 44	70 56	74 31	73 21	81 10	83 46	83 53	83 11
Total.....	96 43	112 59	127 50	137 24	143 00	148 15	161 36	161 52	158 32	162 28	155 07	154 12
Whole number of casts.....	55	56	57	57	55	54	55	53	50	49	46	44
Average interval for each 100 fathoms.....	1 45½	2 01	2 14	2 25	2 36	2 45	2 58	3 03	3 10	3 19	3 22	3 30
Differences		16	18	11	11	9	11	7	7	9	3	8

OF THE U. S. SURVEYING BRIG DOLPHIN—Continued.

of line, from all the casts made with one 32-pound shot.

FATHOMS.															
160	1650	1700	1800	1900	2000	2100	2200	2300	2400	2500	2600	2700	2800	2900	3000
INTERVALS.															
ft.	ft.	ft.	ft.	ft.	ft.	ft.	ft.	ft.	ft.	ft.	ft.	ft.	ft.	ft.	ft.
71 97	71 49	72 34	75 25	87 49	55 53	83 20	28 50	34 28	20 53	20 09	14 43	15 22	4 30	4 44	4 40
8 33	87 03	34 54	96 25	34 53	31 39	77 23	71 97	77 03	62 03	76 10	71 56	67 33	57 05	53 10	44 13
78 43	159 43	169 34	171 50	147 31	115 43	100 17	101 30	103 55	94 13	36 44	33 50	41 25	37 54	43 53	
5	49	44	44	41	37	29	25	25	25	22	21	19	14	13	11
1 29	3 41	3 50	3 54	3 53	3 59	4 00	4 01	4 03	4 07	4 11	4 03	4 23	4 24	4 27	4 33
1	2	3	4	4	1	1	1	2	4	4	—3	17	—1	3	26

DEEP SEA SOUNDINGS TAKEN FROM THE BOATS OF THE U. S. SURVEY

Table showing time of descent with two 32-pound

Date.	FATHOMS.									
	300	400	500	600	700	800	900	1000	1100	1200
	INTERVALS.									
1851.	m. s.	m. s.	m. s.	m. s.	m. s.	m. s.	m. s.	m. s.	m. s.	m. s.
November 23.....	1 30	1 38	1 50	2 10	.....	.....	.....	.....	.....	.....
24.....	1 28	1 42	2 15	2 30	2 18	2 27	2 37	2 48	2 40	2 25
25.....	.....	1 47	2 00	2 01	2 17	2 15	.....	.....	.....	.....
30.....	1 20	1 34	1 46	2 00	.....	.....	.....	.....	.....	.....
30.....	1 28	1 42	1 53	1 57	2 09	2 19	2 29	2 30	2 39	2 50
30.....	1 13	1 34	1 33	1 37	1 52	1 50	2 00	2 03	2 04	2 12
30.....	1 21	1 34	1 40	1 56	2 02	.....	.....	.....	.....	.....
December 1.....	1 30	1 44	1 58	2 04	2 13	2 23	2 30	2 46	2 49	2 47
7.....	1 31	1 41	1 55	1 47	2 01	2 50	2 21	2 26	2 37	3 37
10.....	1 32	1 45	1 53	2 01	2 11	2 17	2 20	2 33	2 40	2 38
13.....	1 35	1 42	1 53	2 00	2 02	2 17	2 12	2 33	2 35	2 42
14.....	1 35	1 47	1 56	2 00	.....	.....	.....	.....	.....	.....
15.....	1 30	1 40	2 14	1 46	2 16	2 19	2 13	2 27	2 42	2 40
16.....	1 49	1 17	1 58	2 03	2 07	.....	.....	.....	.....	.....
16.....	1 24	1 41	2 43	1 57	2 42	1 16	2 22	2 33	2 39	2 39
17.....	1 30	1 37	1 50	1 59	2 10	.....	.....	.....	.....	.....
1852.										
January 3.....	1 23	1 31	1 45	1 49	.....	.....	.....	.....	.....	.....
6.....	1 18	1 30	1 40	1 45	.....	.....	.....	.....	.....	.....
7.....	1 13	1 32	1 40	1 47	1 52	1 58	2 08	2 15	2 26	.....
7.....	1 15	1 25	1 30	1 42	1 53	1 58	2 10	2 14	2 24	.....
9.....	1 16	1 27	1 34	1 43	1 54	2 01	.....	.....	.....	.....
9.....	1 19	1 33	1 41	1 43	1 55	2 10	2 13	2 21	2 31	2 33
11.....	1 14	1 30	1 40	1 46	1 59	2 03	2 14	2 20	2 29	2 36
12.....	1 02	1 07	1 13	1 19	1 25	1 28	1 36	1 35	1 41	1 44
13.....	1 10	1 20	1 32	1 43	1 43	2 02	2 10	2 17	2 20	2 33
14.....	1 09	1 13	1 33	1 38	.....	.....	.....	.....	.....	.....
19.....	1 16	1 24	1 34	1 42	1 52	2 02	2 13	2 19	2 23	2 23
20.....	1 11	1 24	1 13	1 37	2 07	.....	.....	.....	.....	.....
Total.....	37 07	43 26	50 07	52 07	45 00	37 55	35 43	33 00	39 39	36 29
Number of casts..	27	28	23	23	22	13	16	16	16	14
Average intervals for each 100 fathoms..	1 22	1 33	1 47	1 52	2 03	2 06	2 14	2 22	2 29	2 36
Differences.....	.....	11	14	5	11	3	3	3	7	7

ING BRIG DOLPHIN, LIEUT. S PHILLIPS LEE, U. S. NAVY, COMMANDING.

shot, of each 100 fathoms of unwaxed fishing line.

FATHOMS.													
1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	2400	2500	2600
INTERVALS.													
m. s.	m. s.	m. s.	m. s.	m. s.	m. s.	m. s.	m. s.	m. s.	m. s.	m. s.	m. s.	m. s.	m. s.
2 41	3 11	3 08	3 40	3 35									
3 57	3 10	3 12	3 21	3 27	3 29	3 46	3 39	3 47	3 52				
3 06	3 07	3 24	3 22	3 25	3 45	3 39	3 50	3 55					
		3 16	3 21										
2 52	2 37	2 48	3 05										
2 49	2 55	3 00	3 06	3 09	3 17	3 25							
2 46	2 51	3 00											
2 47	2 58	2 57	3 00	3 13	3 10	3 17							
2 39	2 51	2 56	3 00	3 13	3 12	3 24	3 29	3 29	3 36	3 40	3 40	3 57	
1 47	1 45	1 52	1 57	1 56	2 04	2 07	2 10	2 15					
2 41	3 44												
2 32	2 33	2 47	2 48	2 58	3 01	3 03	3 12	3 13	3 17	3 23	3 24	3 34	3 43
2 37	31 50	32 20	30 40	24 46	21 58	22 44	16 20	16 44	10 45	7 03	7 04	7 31	3 43
11	11	11	10	8	7	7	5	5	3	2	2	2	1
2 41	2 54	2 56	3 04	3 06	3 08	3 15	3 16	3 21	3 35	3 31	3 32	3 45	3 43
5	18	2	8	2	2	7	1	5	14	— 4	1	18	— 3

DEEP SEA SOUNDINGS TAKEN FROM THE BOATS

Table showing time of descent with two 32-pound

Date.	FATHOMS.									
	300	400	500	600	700	800	900	1000	1100	1200
	INTERVALS.									
1859.	m. s.	m. s.	m. s.	m. s.	m. s.	m. s.	m. s.	m. s.	m. s.	m. s.
January 30.....	1 15	1 28	1 38	1 44	1 47	2 04	2 14	2 20	2 16	2 25
February 2.....	1 26	1 37	1 45	1 52	2 00	2 06	2 12	2 18	2 41	2 34
Total.....	2 41	3 05	3 23	3 36	3 47	4 10	4 26	4 38	4 57	4 59
Mean	1 20	1 32	1 41	1 48	1 53	2 05	2 13	2 16	2 23	2 29
Differences.....	.....	12	9	7	5	12	8	3	12	1

Table showing average time of descent of each 100 fathoms

Total with unwaxed line.....	m. s.	m. s.	m. s.	m. s.	m. s.	m. s.	m. s.	m. s.	m. s.	m. s.
Total with waxed line	37 07	43 26	50 07	52 07	45 00	37 55	35 43	33 00	39 39	36 29
Aggregate	2 41	3 05	3 23	3 36	3 47	4 10	4 26	4 33	4 57	4 59
Number of casts.....	39 43	46 31	53 30	55 43	43 47	42 05	40 09	43 33	44 36	41 23
Average intervals...	29	30	30	30	24	20	18	18	18	16
Differences.....	1 22	1 33	1 47	1 51	2 02	2 06	2 14	2 22	2 29	2 35
	.....	11	14	4	11	4	3	3	7	6

OF THE U. S. SURVEYING BRIG DOLPHIN—Continued.

shot, of each 100 fathoms of waxed fishing line.

FATHOMS.													
1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	2400	2500	2600
INTERVALS.													
0. 0.	0. 0.	0. 0.	0. 0.	0. 0.	0. 0.	0. 0.	0. 0.	0. 0.	0. 0.	0. 0.	0. 0.	0. 0.	0. 0.
1 36	2 41	3 50	4 45	5 51	6 55	8 00	9 06	10 06	11 10	12 18	13 26	14 36	15 30
1 30	2 38	3 41	4 43	5 43	6 45	7 55	.....	.....	.....	.....	.....	.....	.....
1 06	2 14	3 24	4 27	5 34	6 40	7 56	9 06	10 06	11 10	12 18	13 26	14 36	15 30
1 34	2 37	3 47	4 43	5 47	6 50	8 00	9 06	10 06	11 10	12 18	13 26	14 36	15 30
5	8	10	6	4	3	9	7	2	2	3	1	1	4

from all the casts made with two 32-pound shot.

0. 0.	0. 0.	0. 0.	0. 0.	0. 0.	0. 0.	0. 0.	0. 0.	0. 0.	0. 0.	0. 0.	0. 0.	0. 0.	0. 0.
29 37	31 50	33 30	35 40	37 46	39 58	42 44	45 20	48 44	51 45	54 06	57 04	59 31	62 43
5 06	5 14	5 34	5 37	5 34	5 40	5 58	6 06	6 06	6 10	6 18	6 26	6 26	6 30
34 45	37 04	39 54	42 07	44 20	46 33	48 49	51 36	54 52	58 55	62 16	65 29	68 57	72 13
13	13	13	13	10	9	9	8	6	4	3	3	3	3
2 40	2 51	3 05	3 00	3 03	3 04	3 11	3 14	3 19	3 29	3 25	3 30	3 39	.....
5	11	4	6	2	2	7	1	5	10	— 4	5	9	— 3

List of reported dangers unsuccessfully searched for by Lieutenant S. Phillips Lee, commanding United States surveying brig Dolphin, 1851-52.

Name of reported danger.	Date of discovery.	Assigned position.						Date of search.	Page.		
		Latitude.				Longitude.					
		O	'	"		O	'	"			
Potomac sounding.....	1838	38	10	0	N.	67	26	0	W.	1851. October 17, 20	5
Field's vigia.....	1833	37	31	0	N.	66	0	0	W.	October 16, 23	6
Anfitrite breakers.....	1846	35	50	0	N.	65	58	0	W.	October 24, 28	8
Dyet's rocks.....	1845	32	46	0	N.	60	6	0	W.	Novem'r 2, 8	9
1827, (vigia of).....	1827	31	17	0	N.	53	22	0	W.	Novem'r 15, 16	13
Gandaria's rocks.....	1842	25	30	0	N.	37	45	0	W.	Novem'r 24, 27	15
Gombaudo's rock.....	1764	23	15	0	N.	32	25	0	W.	Decem'r 1, 2	22
Emily's rock and shoal.....	1845	16	59	0	N.	21	30	0	W.	Decem'r 14, 15.	29
										1852.	
French shoal.....	1796	4	15	0	N.	19	20	0	W.	January 13	45
Krusenstern's volcano.....	1806	2	31	0	S.	20	44	0	W.	January 31	61
Triton's bank.....	1816	0	32	0	S.	17	46	0	W.	February 13	67
Bouvet's sandy island.....	1761	0	23	0	S.	19	10	0	W.	February 15	69
Aquila reef.....	1831	0	22	0	S.	21	6	0	W.	February 16	70
Le Pacifique shoal, (shock).....	1771	0	42	0	S.	22	47	0	W.	.....do.....	71
Crown reef.....	1835	0	57	0	S.	23	19	0	W.	February 18	71
Vigia, south of Fernando de Noronha.....		4	43	0	S.	32	43	0	W.	March 10	79
Blaesdale's coral reef.....	1819	0	57	0	N.	41	6	0	W.	April 8, 11	90
Voette's bank.....		15	0	0	N.	48	58	0	W.	May 27, 28	99
Galleon's bank.....	1730	15	56	0	N.	49	40	0	W.	May 29	99
Galissioniere's rock.....	1822	12	20	0	N.	54	49	0	W.	June 2	102
Martin's reef.....	1842	16	42	0	N.	58	53	0	W.	June 6, 7	103
Overfalls's or heavy ripples, Tulloch's & Livingston's.....	1819	24	11	0	N.	61	44	0	W.	June 14	108
Mourand's bank.....	1773	24	34	0	N.	65	10	0	W.	June 17, 20	110

Respectfully recommended that the foregoing be erased from the charts and sailing directions.

SAMUEL PHILLIPS LEE.
Lieutenant United States Navy.

VARIATION OF THE COMPASS.

UNITED STATES SURVEYING BRIG DOLPHIN,

LIEUT. SAMUEL PHILLIPS LEE, COMMANDING.

United States surveying brig Dolphin, Lieutenant Samuel Phillips Lee, commanding.—Variation of the compass.

Date.	Time.	Latitude.	Longitude.	Brig's head.	Variation.	Mean variation.	Observer.
1851.							
October							
9	Sunrise..... 9 a. m.....	39 50 0	72 40 0	{	West. O 6 0 @ amp. 5 23 " az.	Westerly. O 5 41	Mr. Barbot..... do.....
10	8 a. m.....	39 13 0	72 1 0		6 55 @ az.		do.....
14	4 p. m.....	{	{		{ 11 12 " az. 7 22 " az.		do.....
15	9 a. m.....	38 20 0	66 40 0			9 17	do.....
21	7.40 a. m.....	36 54 0	65 52 0	NW. & W.....	9 34 @ az.		do.....
26	8 a. m.....	35 57 0	65 51 0	ENE.....	8 8 " az.		do.....
28	4.20 p. m.....	34 54 0	65 28 0	SE.....	7 28 " az.		do.....
29	4 p. m.....	35 5 0	64 55 0	N. by E.....	8 27 " az.		do.....
2	4 p. m.....	32 46 0	60 6 0	E. & S.....	9 38 " az.		Mr. Mayo.....
3	8 a. m.....	33 1 0	59 59 0	WNW.....	9 20 " az.		Mr. Barbot.....
11	8 a. m.....	31 42 0	58 11 0	NW & N.....	10 40 " az.		do.....
15	4 p. m.....	31 17 0	53 40 0	E. by S.....	11 32 " az.		do.....
16	4 p. m.....	31 17 0	53 12 0	NE. by E.....	12 50 " az.		Mr. Mayo.....
17	4 p. m..... 4 p. m.....	{ 31 3 0	{ 50 6 0	{ E. by S..... do.....	{ 15 5 " az. 15 16 " az.		{ Mr. Barbot..... Mr. Mayo.....
18	8½ a. m..... 8½ a. m.....	{ 31 1 0	{ 47 53 0	{ do..... do.....	{ 15 48 @ az. 15 10 " az.	15 10	{ Mr. Barbot..... Mr. Mayo.....
	3½ p. m..... 3½ p. m.....	{ 30 59 .0	{ 46 45 0	{ do..... do.....	{ 16 41 @ az. 15 26 " az.	15 29	{ Mr. Barbot..... Mr. Mayo.....
19	Sunrise..... 8.10 a. m..... 8.10 a. m.....	{ 31 1 0	{ 44 50 0	{ do..... do..... E. & S.....	{ 16 8 @ amp. 16 46 " az. 17 34 " az.	16 3	{ Mr. Barbot..... do..... Mr. Mayo.....
						16 49	

20

Sunrise.....	30	11	0
8 a. m.....			
8 a. m.....			

43	30	0	{
SE. by S.....			
SSE.....			

16	37	0	amp.
15	53	"	az.
16	33	"	az.

16	31	0	amp.
16	43	"	az.
16	2	"	az.

16	29	0	az.
16	21	"	az.
15	0	"	az.

15	48	"	az.
16	48	0	az.
18	47	"	amp.

15	46	"	az.
16	26	"	az.
17	10	0	az.

18	21	"	az.
15	23	"	az.
18	0	0	az.

18	22	"	az.
18	0	"	az.
17	28	"	az.

18	10	"	az.
18	22	"	az.
18	32	"	az.

19	45	"	az.
18	12	"	amp.
18	22	"	az.

18	4	"	az.
18	36		

December

Variation of the compass—Continued.

Dats.	Time.	Latitude.	Longitude.	Brig's head.	Variation.	Mean variation.	Observer.
1851.		North. " O ' "	West, " O ' "		West. O ' "	Westerly. O ' "	
December 11	9 a. m.....	} 17 34 0	} 22 50 0	SSE.....	19 12 O az.....		Mr. Barbot.....
	9 a. m.....			....do.....	18 28 " az.....		Mr. Mayo.....
	4 p. m.....	} 17 10 0	} 22 23 0	SE. by S.....	19 6 O az.....	18 50	Mr. Barbot.....
	4 p. m.....			SSE.....	18 26 " az.....		Mr. Mayo.....
12	4 p. m.....	} 16 17 0	} 20 53 0	N. $\frac{1}{2}$ E.....	20 20 O az.....	18 46	Mr. Barbot.....
	4 p. m.			N. by E.....	18 36 " az.....		Mr. Mayo.....
	Sunset.....	} 16 23 0	} 20 54 0	N. by W.....	19 33 O amp.....	19 28	Mr. Barbot.....
	8 a. m.....			WNW.....	18 54 " az.....		....do.....
15	8 a. m.....	} 15 24 0	} 21 46 0	SW. by S.....	17 54 " az.....		....do.....
	4 $\frac{1}{2}$ p. m.....			WNW.....	18 56 " az.....		....do.....
	6.20 a. m.....	} 13 16 0	} 23 11 0	SE. by S.....	17 20 O amp.....		....do.....
	8 $\frac{1}{4}$ a. m.....			S. by E.....	17 43 " az.....		....do.....
16	8 $\frac{1}{4}$ a. m.....	} 12 36 0	} 22 21 0	SE. by S.....	17 38 " az.....	17 34	Mr. Mayo.....
	4 $\frac{1}{2}$ p. m.....			S. by E.....	17 2 O az.....		Mr. Barbot.....
	9 a. m.....	} 10 54 0	} 21 52 0	S. by E.....	18 57 " az.....		....do.....
	9 a. m.....			....do.....	14 46 " az.....		Mr. Mayo.....
7	5 $\frac{1}{2}$ p. m.....	} 10 0 0	} 21 35 0	S. $\frac{1}{2}$ W.....	18 2 O amp.....	16 51	Mr. Barbot.....
	8 a. m.....			S. by E.....	17 22 " az.....		....do.....
	8 a. m.....	} 8 57 0	} 20 51 0	....do.....	17 12 " az.....	17 17	Mr. Mayo.....
	8 a. m.....			....do.....	17 30 O az.....		Mr. Barbot.....
10	8 a. m.....	} 5 58 0	} 19 40 0	....do.....	17 48 " az.....	17 39	Mr. Mayo.....
	8 a. m.....			....do.....			

11	5 p. m.....	} }	5 35 0	19 34 0	{ {	West.....	16 40 © az.....	.....	Mr. Barbot.....
	5 p. m.....					.....do.....	18 56 " az.....	17 48	Mr. Mayo.....
15	8 a. m.....	} }	4 40 0	19 27 0	{ {	South.....	18 8 © az.....	.....	Mr. Barbot.....
	8 a. m.....					.....do.....	17 22 " az.....	17 45	Mr. Mayo.....
17	8 a. m.....	} }	3 51 0	19 6 0	{ {	S. by W.....	18 18 © az.....	.....do.....	.....do.....
	4½ p. m.....					.....do.....	19 0 " az.....	.....	Mr. Barbot.....
	4½ p. m.....	} }	3 49 0	19 3 0	{ {	.....do.....	18 22 " az.....	18 41	Mr. Mayo.....
	Sunrise.....					WSW.....	18 28 © amp.....	.....	Mr. Barbot.....
18	4½ p. m.....	} }	3 0 0	18 34 0	{ {	South.....	19 0 " az.....	.....do.....	.....do.....
	4½ p. m.....					N. by W.....	17 38 " az.....	.....	Mr. Mayo.....
19	8 a. m.....	} }	2 12 0	20 7 0	{ {	ENE.....	17 11 " az.....	.....	Mr. Barbot.....
	8 a. m.....					.....do.....	16 20 " az.....	16 45	Mr. Mayo.....
20	8 a. m.....	} }	1 8 0	21 5 0	{ {	SW.....	16 18 © az.....	.....do.....	.....do.....
	5 p. m.....					NE.....	17 12 " az.....	.....	Mr. Barbot.....
	5 p. m.....	} }	0 24 0	21 45 0	{ {	.....do.....	17 10 " az.....	17 11	Mr. Mayo.....
	South.								
21	7½ a. m.....	} }	0 23 0	22 34 0	{ {	SW.....	16 10 © az.....	.....do.....	.....do.....
	5 p. m.....					.....	16 30 " az.....	.....do.	.....do.
22	4½ p. m.....	} }	2 44 0	23 56 0	{ {	SW.....	14 18 " az.....	.....do.....	.....do.....
	5 p. m.....					.....do.....	14 16 " az.....	.....	Mr. Barbot.....
23	5 p. m.....	} }	4 27 0	25 8 0	{ {	.....do.....	13 23 " az.....	13 50	Mr. Mayo.....
	5 p. m.....					SW. by S.....	10 56 © az.....	.....	Mr. Barbot.....
24	8 a. m.....	} }	5 36 0	25 38 0	{ {	.....do.....	11 30 " az.....	11 13	Mr. Mayo.....
	8 a. m.....								

Variation of the compass—Continued.

Date.	Time.	Latitude.	Longitude.	Brg's head.	Variation.	Mean variation.	Observer.
1852.		South. ° , ' "	West. ° , ' "		West. ° , ' "	Westerly. ° , ' "	
January 24	5 p. m.....	6 2 0	25 48 0	SSW.....	10 24 ° az.....	12 53	Mr. Barbot.....
	5 p. m.....			....do.....	12 54 " az.....		Mr. Mayo.....
	5 p. m.....			S. by W.....	15 22 " az.....		Mr. Barbot.....
25	8 a. m.....	6 53 0	25 47 0	S. ½ W.....	12 36 ° az.....	12 13	Mr. Barbot.....
	8 a. m.....			NE.....	13 2 " az.....		....do.....
	8 a. m.....			S. by W.....	11 50 " az.....		Mr. Mayo.....
	8 a. m.....			NE.....	11 25 " az.....		....do.....
	5 p. m.....	6 39 0	25 32 0	NE. by E.....	13 37 ° az.....	14 13	Mr. Barbot.....
	5 p. m.....			....do.....	13 54 " az.....		Mr. Mayo.....
	Sunset.....			.....	15 8 " amp.....		Mr. Barbot.....
26	Sunrise.....	5 33 0	24 54 0	NE. by E.....	14 27 ° amp.....	14 9	Mr. Barbot.....
	7 ½ a. m.....			....do.....	14 58 " az.....		....do.....
	8 a. m.....			....do.....	14 36 " az.....		....do.....
	7 ½ a. m.....			....do.....	13 28 ° az.....		Mr. Mayo.....
	7 ½ a. m.....	4 52 0	24 23 0	....do.....	13 14 " az.....	14 51	....do.....
	4 ½ p. m.....			NE. by E.....	14 46 ° az.....		Mr. Barbot.....
	4 ½ p. m.....			....do.....	14 56 " az.....		Mr. Mayo.....
27	7.40 a. m.....	4 17 0	24 03 0	S. by W.....	14 26 ° az.....	14 21	Mr. Barbot.....
	7.40 a. m.....			NE ½ E.....	14 42 " az.....		....do.....
	7.40 a. m.....			S. by W.....	14 56 " az.....		Mr. Mayo.....
	7.40 a. m.....			NE.....	13 22 " az.....		....do.....
	4 ½ p. m.....	4 21 0	24 07 0	S. by W.....	14 30 ° az.....	14 29	Mr. Barbot.....
	4 ½ p. m.....			....do.....	14 28 " az.....		Mr. Mayo.....

	5 p. m.	0 32 0	17 45 0	{	ENE.	18 58 0 az.	19 2 " az.	do.
14	5 p. m.	0 32 0	17 45 0	}	do.	19 0	Mr. Danels.	do.
	8 a. m.	0 43 0	18 46 0		NW. by W.	16 56 0 az.		do.
15	4½ p. m.	0 33 0	19 6 0	{	NNW.	16 4 " az.	Mr. Barbot.	Mr. Barbot.
	4¾ p. m.			}	do.	19 0 " az.	Mr. Danels.	Mr. Danels.
	4½ p. m.			}	do.	19 4 " amp.	Mr. Barbot.	Mr. Barbot.
16	7¼ a. m.	0 28 0	20 25 0	{	WNW.	17 21 0 az.	18 3	do.
	7½ a. m.			}	do.	17 0 " az.	17 10	Mr. Danels.
	5 p. m.	0 22 0	21 9 0	{	ENE.	17 40 0 az.	16 50	Mr. Barbot.
	5 p. m.			}	do.	16 0 " az.		Mr. Danels.
17	7¼ a. m.	0 25 0	22 22 0		West.	17 8 0 az.		Mr. Barbot.
18	5 p. m.	0 37 0	22 42 0	{	SW. ½ W.	17 7 " az.		do.
	5 p. m.			}	do.	17 0 " az.	17 3	Mr. Danels.
	7¼ a. m.	0 56 0	23 3 0		W. by S.	16 0 0 az.		do.
	4¾ p. m.	0 58 0	23 20 0		do.	17 0 " az.		do.
19	7¼ a. m.	1 30 0	24 21 0	{	SW. by W.	15 8 " az.		Mr. Hall.
	7½ a. m.			}	do.	14 7 " az.	14 37	Mr. Danels.
	4 p. m.	1 50 0	24 52 0	{		14 22 0 az.		Mr. Hall.
	4 p. m.			}		14 6 " az.	14 14	Mr. Danels.
20	7¼ a. m.	2 20 0	26 15 0	{	WSW.	15 3 0 az.		Mr. Barbot.
	7½ a. m.			}	do.	14 27 " az.		do.
	7¾ a. m.			}	do.	14 5 " az.		Mr. Danels.
	7½ a. m.			}	do.	13 33 " az.	14 17	do.
	4½ p. m.	2 46 0	27 19 0	{	SW.	14 4 0 az.		Mr. Barbot.
	4¾ p. m.			}	do.	13 37 " az.		Mr. Danels.
	4½ p. m.			}	NE. by E.	13 34 " az.		Mr. Barbot.
	4½ p. m.			}	do.	13 19 " az.	13 38	Mr. Danels.

Variation of the compass—Continued.

Date.	Time.	Latitude.	Longitude.	Brig's head.	Variation.	Mean variation.	Observer.
1852. February 21		South. °	West. °		West. °	Westerly. °	
	7½ a.m.	3 12 0	28 55 0	W. ½ S.	12 55 ° az.		Mr. Barbot.
	7½ a.m.			.....do.	12 44 " az.		Mr. Danels.
	4 p.m.			SW. by W.	12 47 ° az.	12 50	Mr. Barbot.
	4 p.m.			.....do.	11 59 " az.		.....do.
	4 p.m.	3 22 0	29 25 0	.....do.	13 36 " az.		Mr. Danels.
	4 p.m.			.....do.	13 12 " az.		.....do.
						12 53	
22	7½ a.m.	3 40 0	30 58 0	W. ½ S.	12 3 ° az.		Mr. Barbot.
	7½ a.m.			.....do.	12 23 " az.		Mr. Danels.
						12 13	
	Sunset.	3 29 0	31 49 0	E. ¼ N.	12 17 ° amp.		Mr. Barbot.
	4½ p.m.	6 23 0	33 8 0	SW. by S.	9 2 " az.		Mr. Danels.
	5 p.m.	8 3 0	34 28 0	.....do.	9 16 " az.		.....do.
	8½ a.m.	7 44 0	34 33 0	ENE.	9 1 " az.		Mr. Renshaw.
29 1 8 March	4 p.m.	7 0 0	33 48 0	NE. by E.	9 53 " az.		Mr. Barbot.
	4 p.m.			.....do.	10 1 " az.		Mr. Renshaw.
						9 50	
	7½ a.m.	4 43 0	32 26 0	North	11 19 ° az.		Mr. Barbot.
	4 p.m.	4 43 0	32 42 0	.....do.	10 28 " az.		.....do.
	8 a.m.	4 9 0	32 34 0	NE. by E.	10 32 " az.		.....do.
	5 p.m.	3 45 0	33 47 0	NE. ½ E.	10 5 " az.		Mr. Barbot.
	7½ a.m.	3 44 0	33 55 0	SSW	10 29 " az.		.....do.
10 11 18 19	5 p.m.	3 18 0	33 39 0	NE.	10 1 " az.		.....do.
	7½ a.m.			S. by W.	9 58 " az.		.....do.
	7½ a.m.	3 4 0	33 10 0	.....do.	9 35 " az.		.....do.
	7½ a.m.			.....do.	11 40 " az.		Mr. Renshaw.
						10 24	

22	5 p. m.....	{	33 38	0	{	E. by N..... ...do..... SSW..... ...do..... ENE.....	10 42 10 39 10 6 9 49 10 30	az. " az. " az. " az. " amp.	10 21	Mr. Barbot. Mr. Renshaw. do. Mr. Barbot. do.
	5 p. m.....									
	5 p. m.....									
	5 p. m.....									
	Sunset.....									
	7 3/4 a. m.....	{	33 30	0	{	ENE..... ...do.....	9 52 10 40	az. " az.	10 16	Mr. Barbot. Mr. Renshaw.
	7 3/4 a. m.....									
	4 1/4 p. m.....	{	33 32	0	{	West..... ...do.....	9 53 10 9	az. " az.	10 0	Mr. Barbot. Mr. Renshaw.
	4 1/4 p. m.....									
	8 a. m.....	{	33 45	0	{	SSE..... ...do.....	11 6 11 3	az. " az.	11 4	Mr. Barbot. Mr. Renshaw.
	8 a. m.....									
	4 3/4 p. m.....	{	33 45	0	{	South..... ...do.....	10 39 10 34	az. " az.	10 36	Mr. Barbot. Mr. Renshaw.
	4 3/4 p. m.....									
	8 1/4 a. m.....	{	33 48	0	{	S. by E.....	10 8	az.	10 0	Mr. Barbot.
	6 a. m.....									
	8 a. m.....	{	33 38	0	{	NE. by E..... ENE.....	11 0 11 7 11 40	amp. " az. " az.	11 16	do. do. Mr. Renshaw.
	8 a. m.....									
	4 p. m.....	{	33 44	0	{	NE..... ...do.....	11 41 10 35	az. " az.	11 8	Mr. Barbot. Mr. Renshaw.
	4 p. m.....									
	7 3/4 a. m.....	{	34 5	0	{	NE.....	11 15	az.	10 41	Mr. Barbot.
	4 p. m.....									
	4 p. m.....	{	33 55	0	{	NE..... S. by W.....	10 53 10 30	az. " az.	10 15	Mr. Barbot. Mr. Renshaw.
	4 p. m.....									
	8 a. m.....	{	33 52	0	{	NE.....	10 5	az.	9 15	Mr. Renshaw.
	7 1/2 a. m.....									
	7 1/2 a. m.....	{	34 29	0	{	NE. by E..... ...do.....	9 19 9 12	az. " az.	9 15	Mr. Barbot. Mr. Renshaw.
	5 p. m.....									
	7 3/4 a. m.....	{	34 48	0	{	NNE.....	9 36	az.	9 15	Mr. Renshaw.
	7 3/4 a. m.....									
	5 p. m.....	{	34 59	0	{	S. by E.....	9 49	az.	9 15	Mr. Barbot.
	7 3/4 a. m.....									

Variation of the compass—Continued.

Date.	Time.	Latitude.	Longitude.	Brig's head.	Variation.	Mean variation.	Observer.
1852.		South. °	West. °		West. °	Westerly. °	
March 29	4½ p. m.	4 27 0	35 4 0	NE.	9 8 " az.		Mr. Renshaw
30	7½ a. m.	4 25 0	35 15 0	E. by N.	9 0 " az.		Mr. Renshaw
	7½ a. m.			N. by E.	8 30 " az.		do.
31	4½ p. m.	4 18 0	35 21 0	NW.	8 56 " az.	8 45	Mr. Barbot
April 1	7½ a. m.	4 0 0	35 28 0	N. ½ E.	8 48 " az.		do.
	7½ a. m.			do.	8 49 " az.		Mr. Renshaw
	4½ p. m.	3 18 0	35 46 0	SSE.	9 0 " az.		Mr. Barbot
	4½ p. m.			do.	8 55 " az.		Mr. Renshaw
2	7½ a. m.	2 34 0	36 36 0	do.	8 27 " az.	8 57	Mr. Barbot
	7½ a. m.			do.	8 58 " az.		Mr. Renshaw
3	8¼ a. m.	2 22 0	36 36 0	ESE.	8 14 " az.		Mr. Barbot
	8¼ a. m.			do.	9 0 " az.		Mr. Renshaw
	4½ p. m.	2 23 0	36 29 0	NE.	8 2 " az.	8 37	do.
4	8 a. m.	2 21 0	36 33 0	N. by W.	8 38 " az.		Mr. Barbot
	4½ p. m.	2 13 0	36 42 0	do.	9 28 " az.		do.
5	7½ a. m.	1 28 0	37 19 0	NNW.	8 20 " az.		do.
	7½ a. m.			do.	8 4 " az.		Mr. Renshaw
	4½ p. m.	1 6 0	37 34 0	SE. by E.	8 57 " az.	8 12	Mr. Barbot
	4½ p. m.			SE. by S.	8 22 " az.		Mr. Renshaw
						8 38	

	North.			South.			North.			South.		
	Time.	Lat.	Long.	Time.	Lat.	Long.	Time.	Lat.	Long.	Time.	Lat.	Long.
7	7 $\frac{1}{2}$ a. m.	0 11 0	38 45 0	7 $\frac{1}{2}$ a. m.	0 35 0	39 22 0	NW. by W.	7 23 0 az.	Mr. Barbot.	7 54 "	7 38	Mr. Renshaw.
	4 $\frac{1}{2}$ p. m.	0 46 0	40 27 0		0 54 0	40 52 0	NW.	8 0 0 az.	Mr. Barbot.			
8	8 $\frac{1}{2}$ a. m.	0 48 0	41 16 0		0 59 0	41 28 0	SE.	6 14 " az.	do.	6 42 "	6 28	Mr. Renshaw.
	4 $\frac{1}{2}$ p. m.	1 6 0	43 2 0		1 6 0	43 43 0	WNW.	6 7 0 az.	Mr. Barbot.			
9	7 $\frac{1}{2}$ a. m.	1 6 0	43 43 0		1 6 0	43 43 0	ESE.	6 8 " az.	do.			
10	7 $\frac{1}{2}$ a. m.	1 6 0	43 43 0		1 6 0	43 43 0	SE.	6 29 " az.	do.	6 17 "	6 23	Mr. Hall.
	4 $\frac{1}{2}$ p. m.	1 6 0	43 43 0		1 6 0	43 43 0	WNW.	6 18 0 az.	Mr. Barbot.			
11	7 $\frac{1}{2}$ a. m.	1 6 0	43 43 0		1 6 0	43 43 0	WNW.	6 22 " az.	Mr. Hall.			
	4 $\frac{1}{2}$ p. m.	1 6 0	43 43 0		1 6 0	43 43 0	WNW.	4 35 0 az.	do.			
12	7 $\frac{1}{2}$ a. m.	1 6 0	43 43 0		1 6 0	43 43 0	WNW.	4 30 " az.	do.			
	4 $\frac{1}{2}$ p. m.	1 6 0	43 43 0		1 6 0	43 43 0	WNW.					
15	8 a. m.	0 38 0	46 38 0		0 38 0	46 38 0	WSW.	1 26 " az.	Mr. Barbot.			
25	8 a. m.	0 38 0	46 38 0		0 38 0	46 38 0	WSW.	2 19 " az.	do.			
26	4 $\frac{1}{2}$ p. m.	0 49 0	45 40 0		0 49 0	45 40 0	E. by S.	2 31 0 az.	Mr. Hall.			
	4 $\frac{1}{2}$ p. m.	0 49 0	45 40 0		0 49 0	45 40 0	E. by S.	2 19 " az.	Mr. Barbot.			
27	7 $\frac{1}{2}$ a. m.	0 43 0	45 1 0		0 43 0	45 1 0	W. by N.	2 17 0 az.	do.			
	7 $\frac{1}{2}$ a. m.	0 43 0	45 1 0		0 43 0	45 1 0	W. by N.	2 37 " az.	Mr. Hall.			
29	4 $\frac{1}{2}$ p. m.	0 54 0	44 52 0		0 54 0	44 52 0	ENE.	2 37 0 az.	Mr. Barbot.			
	4 $\frac{1}{2}$ p. m.	0 54 0	44 52 0		0 54 0	44 52 0	ENE.	2 40 " az.	Mr. Hall.			
	7 $\frac{1}{2}$ a. m.	0 55 0	43 35 0		0 55 0	43 35 0	NW. by N.	3 18 0 az.	Messrs. Barbot and Hall.			

Variation of the compass—Continued.

Date.	Time.	Latitude.	Longitude.	Brig's head.	Variation.	Mean variation.	Observer.
1852. May	2 8½ a.m. 8¼ a.m.	North. 0 23 0	West. 0 45 43 0	{ SW. by W. .....do.	West. 0 2 15 " az.	Westerly. 0 2 0	Mr. Barbot.
					1 45 " az.		Mr. Mayo.
	4½ p.m. 4¼ p.m.	South. 0 3 0	46 19 0	{ SW. .....do.	2 33 " az.	2 27	Mr. Barbot.
					2 22 " az.		Mr. Mayo.
	16 4½ p.m. 4¼ p.m.	North. 1 46 0	48 47 0	{ East.....do.	0 14 " az.	0 50	Mr. Barbot.
					1 27 " az.		Mr. Mayo.
	18 7½ a.m. 7¼ a.m.	2 31 0	48 15 1	{ ESE.....do.	0 56 " az.	0 56	Mr. Barbot.
					0 56 " az.		Mr. Mayo.
	19 7½ a.m. 7¼ a.m.	2 42 0	47 59 0	{ SE. .....do.	0 19 E " az.	0 50	Mr. Barbot.
					2 0 W " az.		Mr. Mayo.
	20 9 a.m.	3 36 0	48 11 0	{ SE.	1 44 " az.	1 47	Mr. Barbot.
					1 4 " az.		Mr. Mayo.
21	8½ a.m. 8¼ a.m.	3 49 0	48 3 0	{ N. by W. .....do.	1 37 " az.	1 32	Mr. Barbot.
					1 28 " az.		Mr. Mayo.
	4 p.m. 4 p.m.	4 2 0	47 59 0	{ SE. by E. .....do.	1 22 " az.	1 35	Mr. Barbot.
					1 48 " az.		Mr. Mayo.
	22 8½ a.m. 4 p.m.	4 25 0 6 48 0	47 41 0 47 47 0	{ SE. E. N. E.	1 34 " az.	1 35	.....do.
					2 50 " az.		Mr. Barbot.

June

26	4½ p. m.....	11 13 0	47 39 0	North.....	3 56 "	Mr. Mayo.....
27	4½ p. m.....	14 24 0	48 26 0	NNE.....	5 0 "	do.....
28	4 p. m.....	15 0 0	49 4 0	West.....	4 25 "	do.....
31	7½ a. m.....	13 30 0	52 25 0	SW. ½ S.....	1 16 "	Mr. Danels.....
1	4½ p. m.....	11 48 0	53 50 0	NW. by N.....	0 44 "	Mr. Barbot.....
2	8 a. m.....	12 22 0	54 8 0	N. by W.....	1 3 "	Mr. Danels.....
3	5½ p. m.....	14 34 0	54 42 0	N. ½ E.....	1 30 "	do.....
4	4½ p. m.....	15 28 0	55 30 0	W. by S.....	2 7 ☉ az.	Mr. Barbot.....
	4½ p. m.....			do.....	1 58 "	Mr. Danels.....
5	8 a. m.....	15 54 0	56 53 0	WNW.....	1 25 ☉ az.	do.....
7	7½ a. m.....	16 27 0	58 44 0	SSE.....	0 19 "	do.....
8	5 p. m.....	16 42 0	59 6 0	N. by W.....	1 1 "	Mr. Barbot.....
	8 a. m.....	18 9 0	59 29 0	N. by E.....	0 49 "	Mr. Danels.....
9	4½ p. m.....	21 13 0	59 36 0	NNW.....	2 57 "	Mr. Barbot.....
	4½ p. m.....			do.....	2 30 "	Mr. Danels.....
11	7½ a. m.....	24 46 0	59 54 0	N. by W.....	3 0 ☉ az.	Mr. Barbot.....
	5 p. m.....	25 35 0	60 5 0	N. ½ E.....	6 20 "	Mr. Barbot.....
	5 p. m.....			do.....	5 45 "	Mr. Danels.....
12	4½ p. m.....	26 5 0	60 2 0	S. by W.....	6 36 ☉ az.	Mr. Barbot.....
	4½ p. m.....			do.....	5 45 "	Mr. Danels.....
13	4½ p. m.....	24 16 0	60 56 0	S. by W.....	5 57 ☉ az.	Mr. Barbot.....
	4½ p. m.....			do.....	5 18 "	Mr. Danels.....
14	5 p. m.....	24 14 0	61 41 0	NE. by N.....	3 30 ☉ az.	Mr. Barbot.....
	5 p. m.....			do.....	3 35 "	Mr. Danels.....
16	7½ a. m.....	24 36 0	64 26 0	SE. by E.....	2 17 ☉ az.	Mr. Barbot.....
	7½ a. m.....			do.....	2 13 "	Mr. Danels.....
71	7½ a. m.....	24 38 0	65 3 0	SSW.....	2 17 ☉ az.	Mr. Barbot.....

Variation of the compass—Continued.

Date.	Time.	Latitude.	Longitude.	Brig's head.	Variation.	Mean variation.	Observer.
1852.		North. ° ' "	West. ° ' "		West. ° ' "	Westerly. ° ' "	
June 18	Sunset.....	24 43 00	65 23 0	SW	2 26 © amp.....	.....	Mr. Barbot.....
20	Sunset.....	24 34 00	65 11 0	SE. ½ S.....	2 26 " amp.....	.....	.....do.....
21	7½ a. m.....	25 8 0	66 18 0	West.....	0 21 " az.....	.....	Mr. Barbot.....
	7½ a. m.....			.....do.....	0 19 " az.....	.....	Mr. Danels.....
23	7½ a. m.....	27 24 0	67 59 0	NW. by N.....	2 6 © az.....	0 20	Mr. Barbot.....
	4¾ p. m.....	27 55 0	68 22 0	NW. by N.....	2 47 " az.....	.....	Mr. Danels.....
25	7¾ a. m.....	30 42 0	70 10 0	NW. by N.....	3 5 " az.....	.....	Mr. Barbot.....
	7¾ a. m.....			.....do.....	1 28 " az.....	.....	Mr. Danels.....
30	7¼ a. m.....	38 14 0	74 15 0	N. by E. ½ E...	4 36 © az.....	2 16	Mr. Barbot.....

*Temperature of the air and the surface water, United States surveying brig
Dolphin, Lieut. S. Phillips Lee, commanding, Atlantic, 1851-'52.*

OCTOBER 8.

Hour.	Air.	Water surface.	Hour.	Air.	Water surface.
A. M.	°	°	P. M.	°	°
1	1	63	62
2	2	71	62
3	3	73	62
4	4	73	62
5	5	69	62
6	6	69	62
7	7	65	62
8	8	64	61
9	9	63	59
10	10	63	59
11	11	63	59
12	61	60	12	63	59

12 m.—Latitude 40° 21' N. ; longitude 73° 45' W.
8 p. m.—Latitude 40 07 N. ; longitude 73 22 W

OCTOBER 9.

A. M.	°	°	P. M.	°	°
1	59	59	1	72	62
2	59	58	2	73	60
3	59	58	3	69	62
4	59	58	4	66	62
5	60	58	5	65	61
6	60	58	6	64	61
7	61	59	7	63	..
8	65	60	8	63	..
9	64	60	9	64	59
10	70	60	10	63	59
11	72	61	11	63	59
12	73	60	12	61	60

4 a. m.—Latitude 39° 52' N. ; longitude 72° 36' W.
12 m.—Latitude 39 53 N. ; longitude 72 42 W.
8 p. m.—Latitude 39 48 N. ; longitude 72 37 W.

OCTOBER 10.

A. M.	°	°	P. M.	°	°
1	62	60	1	69	66
2	61	60	2	71	66
3	64	61	3	71	66
4	64	61	4	71	66
5	65	62	5	71	66
6	65	62	6	70	66
7	69	65	7	69	66
8	69	64	8	69	67
9	70	65	9	70	68
10	69	65	10	70	68
11	69	66	11	70	68
12	69	66	12	69	68

4 a. m.—Latitude 39° 23' N. ; longitude 72° 14' W.
12 m.—Latitude 38 59 N. ; longitude 71 45 W.
8 p. m.—Latitude 38 22 N. ; longitude 71 24 W.

Temperature of the air and the surface water—Continued.

OCTOBER 11.

Hour.	Air.	Water surface.	Hour.	Air.	Water surface.
A. M.	°	°	P. M.	°	°
1	70	68	1	71	72
2	70	68	2	73	72
3	70	68	3	75	73
4	70	68	4	71	73
5	70	68	5	71	..
6	70	68	6	70	..
7	71	68	7	71	71
8	71	75	8	71	71
9	74	75	9	73	72
10	73	74	10	73	72
11	72	74	11	73	73
12	72	74	12	73	73

4 a. m.—Latitude 37° 51' N.; longitude 71° 05' W.

12 m.—Latitude 37 38 N.; longitude 70 58 W.

8 p. m.—Latitude 37 35 N.; longitude 70 30 W.

OCTOBER 12.

A. M.	°	°	P. M.	°	°
1	73	73	1	76	79
2	75	77	2	79	78
3	75	77	3	79	78
4	75	77	4	79	78
5	76	77	5	79	78
6	76	79	6	79	78
7	76	80	7	79	72
8	76	80	8	79	72
9	78	80	9	75	73
10	78	81	10	75	75
11	78	79	11	75	73
12	79	79	12	75	73

4 a. m.—Latitude 37° 59' N.; longitude 70° 10' W.

12 m.—Latitude 37 59 N.; longitude 69 56 W.

8 p. m.—Latitude 38 20 N.; longitude 69 01 W.

OCTOBER 13.

A. M.	°	°	P. M.	°	°
1	76	74	1	77	71
2	76	74	2	77	72
3	76	72	3	77	72
5	76	72	4	75	72
5	75	71	5	74	71
6	74	71	6	74	71
7	73	72	7	74	74
8	73	72	8	73	73
9	71	72	9	73	73
10	75	71	10	74	72
11	75	71	11	74	73
12	77	71	12	74	72

4 a. m.—Latitude 38° 27' N.; longitude 69° 18' W.

12 m.—Latitude 38 22 N.; longitude 67 15 W.

8 p. m.—Latitude 38 24 N.; longitude 67 02 W.

Temperature of the air and the surface water—Continued.

OCTOBER 14.

Hour.	Air.	Water surface.	Hour.	Air.	Water surface.
A. M.	°	°	P. M.	°	°
1	74	74	1	72	72
2	74	71	2	73	72
3	74	69	3	73	73
4	74	69	4	75	73
5	73	68	5	75	72
6	73	71	6	78	72
7	73	72	7	73	70
8	74	74	8	72	72
9	75	72	9	71	72
10	75	72	10	73	71
11	75	72	11	73	71
12	75	72	12	73	71

4 a. m.—Latitude 38° 25' N.; longitude 66° 40' W.

12 m.—Latitude 38 28 N.; longitude 66 42 W.

8 p. m.—Latitude 38 26 N.; longitude 66 41 W.

OCTOBER 15.

A. M.	°	°	P. M.	°	°
1	73	71	1	70	73
2	69	71	2	69	73
3	69	71	3	70	75
4	67	69	4	69	75
5	67	71	5	69	76
6	67	71	6	68	80?
7	69	73	7	69	77
8	68	72	8	69	76
9	69	72	9	69	77
10	68	74	10	68	77
11	68	74	11	68	76
12	68	74	12	67	77

4 a. m.—Latitude 38° 21' N.; longitude 66° 40' W.

12 m.—Latitude 38 14 N.; longitude 66 42 W.

8 p. m.—Latitude 37 42 N.; longitude 66 47 W.

OCTOBER 16.

A. M.	°	°	P. M.	°	°
1	68	76	1	68	77
2	68	76	2	68	77
3	68	76	3	68	76
4	68	77	4	65	77
5	67	77	5	65	77
6	68	77	6	63	77
7	67	77	7	61	77
8	67	76	8	61	77
9	67	77	9	63	76
10	67	77	10	63	76
11	66	77	11	61	76
12	66	77	12	61	76

4 a. m.—Latitude 37° 31' N.; longitude 66° 52' W.

12 m.—Latitude 36 43 N.; longitude 66 06 W.

8 p. m.—Latitude 37 48 N.; longitude 66 16 W.

Temperature of the air and the surface water—Continued.

OCTOBER 17.

Hour.	Air.	Water surface.	Hour.	Air.	Water surface.
A. M.	°	°	P. M.	°	°
1	60	77	1	64	73
2	60	76	2	64	72
3	59	76	3	64	72
4	60	76	4	64	73
5	60	76	5	64	73
6	60	76	6	61	75
7	60	76	7	61	75
8	60	77	8	61	75
9	61	75	9	61	75
10	61	75	10	61	75
11	61	75	11	62	75
12	63	75	12	63	75

4 a. m.—Latitude 37° 53' N.; longitude 66° 48' W.
12 m.—Latitude 38 07 N.; longitude 66 46 W.
8 p. m.—Latitude 38 06 N.; longitude 67 09 W.

OCTOBER 18.

A. M.	°	°	P. M.	°	°
1	63	75	1	70	75
2	64	72	2	70	74
3	64	72	3	70	75
4	64	71	4	70	76
5	64	71	5	70	76
6	62	70	6	69	76
7	67	71	7	68	..
8	66	71	8	..	..
9	66	71	9	68	76
10	67	71	10	68	76
11	69	71	11	68	77
12	70	71	12	68	77

4 a. m.—Latitude 38° 10' N.; longitude 67° 25' W.
12 m.—Latitude 38 08 N.; longitude 67 23 W.
8 p. m.—Latitude 38 02 N.; longitude 67 19 W.

OCTOBER 19.

A. M.	°	°	P. M.	°	°
1	69	77	1	73	75
2	69	77	2	73	73
3	69	77	3	73	73
4	69	77	4	73	73
5	69	77	5	73	73
6	69	77	6	73	73
7	69	77	7	71	73
8	75	75	8	71	75
9	80?	73	9	69	73
10	80?	73	10	69	73
11	75	73	11	69	73
12	75	73	12	69	73

4 a. m.—Latitude 38° 10' N.; longitude 67° 10' W.
12 m.—Latitude 38 02 N.; longitude 67 04 W.
8 p. m.—Latitude 38 09 N.; longitude 66 36 W.

Temperature of the air and the surface water—Continued.

OCTOBER 20.

Hour.	Air.	Water surface.	Hour.	Air.	Water surface.
A. M.	°	°	P. M.	°	°
1	69	75	1	71	75
2	70	75	2	72	75
3	70	75	3	73	74
4	70	75	4	72	74
5	70	75	5	72	74
6	70	76	6	72	74
7	71	76	7	71	71
8	71	76	8	71	72
9	71	74	9	71	71
10	72	74	10	70	71
11	72	75	11	70	71
12	72	75	12	70	72

4 a. m.—Latitude 38° 01' N.; longitude 66° 04' W.

12 m.—Latitude 37 44 N.; longitude 65 20 W.

8 p. m.—Latitude 37 17 N.; longitude 65 29 W.

OCTOBER 21.

A. M.	°	°	P. M.	°	°
1	69	73	1	73	73
2	67	73	2	73	73
3	67	73	3	73	73
4	67	73	4	73	73
5	67	73	5	72	73
6	67	73	6	70	73
7	69	73	7	68	73
8	69	73	8	68	73
9	69	72	9	67	72
10	72	72	10	66	72
11	72	72	11	66	73
12	72	72	12	66	73

4 a. m.—Latitude 36° 35' N.; longitude 65° 47' W.

12 m.—Latitude 36 53 N.; longitude 65 57 W.

8 p. m.—Latitude 37 03 N.; longitude 66 15 W.

OCTOBER 22.

A. M.	°	°	P. M.	°	°
1	69	73	1	76	73
2	69	73	2	73	73
3	69	73	3	73	73
4	69	73	4	73	73
5	66	73	5	73	74
6	65	72	6	73	75
7	69	72	7	72	74
8	70	72	8	70	73
9	70	74	9	73	74
10	75	76	10	73	74
11	78	73	11	73	74
12	78	73	12	73	74

4 a. m.—Latitude 37° 20' N.; longitude 65° 51' W.

12 m.—Latitude 37 26 N.; longitude 65 48 W.

8 p. m.—Latitude 37 29 N.; longitude 66 06 W.

S. Doc. 59.

Temperature of the air and the surface water—Continued.

OCTOBER 23.

Hour.	Air.	Water surface.	Hour.	Air.
A. M.	°	°	P. M.	°
1	70	75	1	68
2	70	75	2	68
3	70	75	3	68
4	70	75	4	67
5	73	75	5	66
6	73	75	6	63
7	73	75	7	63
8	71	74	8	63
9	70	74	9	61
10	69	71	10	61
11	69	70	11	61
12	69	70	12	61

4 a. m.—Latitude 37° 46' N.; longitude 66° 00' W.

12 m.—Latitude 37 31 N.; longitude 65 48 W.

8 p. m.—Latitude 37 14 N.; longitude 65 06 W.

OCTOBER 24.

A. M.	°	°	P. M.	°
1	61	71	1	70
2	61	72	2	70
3	61	72	3	70
4	62	71	4	70
5	63	72	5	70
6	63	70	6	70
7	64	71	7	68
8	64	71	8	66
9	65	72	9	65
10	65	71	10	65
11	65	71	11	65
12	65	71	12	65

4 a. m.—Latitude 36° 30' N.; longitude 65° 29' W.

12 m.—Latitude 35 50 N.; longitude 65 58 W.

8 p. m.—Latitude 35 45 N.; longitude 65 56 W.

OCTOBER 25.

A. M.	°	°	P. M.	°
1	63	71	1	71
2	63	72	2	71
3	64	72	3	71
4	64	71	4	71
5	64	71	5	71
6	64	71	6	71
7	64	71	7	71
8	64	71	8	71
9	66	71	9	70
10	68	72	10	69
11	69	72	11	69
12	69	72	12	69

4 a. m.—Latitude 35° 42' N.; longitude 66° 00' W.

12 m.—Latitude 35 53 N.; longitude 65 51 W.

8 p. m.—Latitude 35 52 N.; longitude 66 26 W.

Temperature of the air and the surface water—Continued.

OCTOBER 26.

Hour.	Air.	Water surface.	Hour.	Air.	Water surface.
A. M.	°	°	P. M.	°	°
1	71	72	1	76	73
2	71	72	2	77	73
3	71	73	3	77	73
4	71	72	4	77	72
5	69	73	5	77	73
6	71	73	6	75	73
7	73	72	7	73	73
8	73	73	8	72	73
9	73	73	9	72	73
10	74	72	10	72	73
11	75	72	11	72	73
12	75	72	12	74	73

4 a. m.—Latitude 35° 54' N.; longitude 66° 14' W.

12 m.—Latitude 35 58 N.; longitude 65 36 W.

8 p. m.—Latitude 35 50 N.; longitude 66 23 W.

OCTOBER 27.

A. M.	°	°	P. M.	°	°
1	71	72	1	71	72
2	71	73	2	70	71
3	71	72	3	70	71
4	71	72	4	66	72
5	72	72	5	64	71
6	73	72	6	64	71
7	75	72	7	63	71
8	75	72	8	63	71
9	75	72	9	63	72
10	73	72	10	63	72
11	73	72	11	63	72
12	73	72	12	62	72

4 a. m.—Latitude 35° 56' N.; longitude 66° 18' W.

12 m.—Latitude 35 56 N.; longitude 65 55 W.

8 p. m.—Latitude 35 52 N.; longitude 65 52 W.

OCTOBER 28.

A. M.	°	°	P. M.	°	°
1	62	72	1	67	73
2	62	72	2	67	72
3	62	72	3	67	72
4	62	72	4	67	72
5	62	72	5	68	72
6	62	72	6	68	72
7	63	70	7	66	71
8	64	71	8	66	71
9	63	71	9	67	72
10	65	71	10	67	72
11	65	72	11	68	72
12	67	72	12	69	72

4 a. m.—Latitude 35° 46' N.; longitude 65° 47' W.

12 m.—Latitude 35 07 N.; longitude 65 49 W.

8 p. m.—Latitude 34 42 N.; longitude 65 07 W.

S. Doc. 59.

Temperature of the air and the surface water—Continued.

OCTOBER 29.

Hour.	Air.	Water surface.	Hour.	Air.	Water surface.
A. M.	°	°	P. M.	°	°
1	69	72	1	73	72
2	68	73	2	73	71
3	68	72	3	71	71
4	67	73	4	71	71
5	68	73	5	71	73
6	69	68	6	68	73
7	70	68	7	69	72
8	70	68	8	69	72
9	70	71	9	69	72
10	69	72	10	69	71
11	70	72	11	69	71
12	70	72	12	69	71

4 a. m.—Latitude 34° 27' N.; longitude 64° 35' W.
 12 m.—Latitude 34 57 N.; longitude 64 58 W.
 8 p. m.—Latitude 35 12 N.; longitude 64 51 W.

OCTOBER 30.

A. M.	°	°	P. M.	°	°
1	71	71	1	74	72
2	71	71	2	74	72
3	71	71	3	75	72
4	71	71	4	74	73
5	68	72	5	73	73
6	68	73	6	71	73
7	69	73	7	69	71
8	71	72	8	69	71
9	72	72	9	69	71
10	72	72	10	60	71
11	73	72	11	69	71
12	74	72	12	69	72

4 a. m.—Latitude 34° 56' N.; longitude 64° 31' W.
 12 m.—Latitude 35 19 N.; longitude 65 08 W.
 8 p. m.—Latitude 35 27 N.; longitude 65 03 W.

OCTOBER 31.

A. M.	°	°	P. M.	°	°
1	69	72	1	73	72
2	69	72	2	73	73
3	69	72	3	73	73
4	69	72	4	73	72
5	69	72	5	72	72
6	71	72	6	70	72
7	71	72	7	71	71
8	71	73	8	71	71
9	71	73	9	70	71
10	73	73	10	70	71
11	73	73	11	70	71
12	73	73	12	70	71

4 a. m.—Latitude 35° 29' N.; longitude 64° 39' W.
 12 m.—Latitude 35 22 N.; longitude 64 04 W.
 8 p. m.—Latitude 35 12 N.; longitude 63 31 W.

Temperature of the air and the surface water—Continued.

NOVEMBER 1.

Hour.	Air.	Water surface.	Hour.	Air.	Water surface.
A. M.	°	°	P. M.	°	°
1	70	72	1	74	73
2	70	72	2	75	73
3	71	72	3	74	73
4	71	72	4	74	72
5	69	72	5	74	72
6	69	72	6	74	72
7	70	72	7	70	72
8	70	72	8	69	72
9	72	72	9	69	72
10	74	72	10	70	72
11	75	72	11	70	72
12	75	72	12	70	72

4 a. m.—Latitude 34° 59' N.; longitude 62° 43' W.

12 m.—Latitude 34 37 N.; longitude 61 49 W.

8 p. m.—Latitude 33 51 N.; longitude 61 08 W.

NOVEMBER 2.

A. M.	°	°	P. M.	°	°
1	69	71	1	73	73
2	69	71	2	73	74
3	69	71	3	73	74
4	68	71	4	72	73
5	68	71	5	72	74
6	68	71	6	..	74
7	69	72	7	72	72
8	70	72	8	72	72
9	72	72	9	71	73
10	72	72	10	69	73
11	72	73	11	69	73
12	72	73	12	69	73

4 a. m.—Latitude 33° 10' N.; longitude 60° 41' W.

12 m.—Latitude 32 46 N.; longitude 60 24 W.

8 p. m.—Latitude 32 47 N.; longitude 59 56 W.

NOVEMBER 3.

A. M.	°	°	P. M.	°	°
1	71	73	1	77	72
2	71	73	2	77	72
3	71	73	3	77	71
4	71	73	4	77	72
5	69	73	5	77	72
6	69	73	6	77	72
7	70	73	7	75	72
8	70	73	8	75	72
9	70	73	9	73	72
10	71	73	10	71	72
11	72	73	13	70	72
12	71	73	12	70	72

4 a. m.—Latitude 32° 54' N.; longitude 59° 48' W.

12 m.—Latitude 33 08 N.; longitude 60 10 W.

8 p. m.—Latitude 33 08 N.; longitude 60 25 W.

Temperature of the air and the surface water—Continued.

NOVEMBER 4.

Hour.	Air.	Water surface.	Hour.	Air.	Water surface.
A. M.	°	°	P. M.	°	°
1	71	72	1	74	73
2	71	72	2	74	73
3	72	71	3	74	73
4	72	71	4	71	73
5	74	71	5	70	73
6	75	72	6	68	73
7	75	72	7	70	73
8	76	72	8	70	73
9	80	74	9	70	73
10	78	73	10	70	73
11	78	73	11	70	73
12	78	73	12	70	73

4 a. m.—Latitude 33° 08' N.; longitude 60° 15' W.
12 m.—Latitude 33 05 N.; longitude 60 11 W.
8 p. m.—Latitude 33 00 N.; longitude 59 56 W.

NOVEMBER 5.

A. M.	°	°	P. M.	°	°
1	70	73	1	71	73
2	68	73	2	71	73
3	70	73	3	71	73
4	70	73	4	71	73
5	69	73	5	71	73
6	69	73	6	70	73
7	69	73	7	69	73
8	70	73	8	68	73
9	71	73	9	68	73
10	71	73	10	68	73
11	71	73	11	68	72
12	71	73	12	68	72

4 a. m.—Latitude 32° 50' N.; longitude 59° 51' W.
12 m.—Latitude 32 46 N.; longitude 59 45 W.
8 p. m.—Latitude 32 44 N.; longitude 59 47 W.

NOVEMBER 6.

A. M.	°	°	P. M.	°	°
1	68	72	1	78	72
2	70	72	2	77	73
3	70	72	3	75	73
4	70	72	4	75	72
5	68	72	5	75	72
6	68	72	6	75	72
7	68	72	7	75	73
8	68	73	8	75	73
9	70	72	9	72	73
10	71	72	10	71	73
11	72	72	11	71	73
12	72	72	12	74	73

4 a. m.—Latitude 32° 46' N.; longitude 59° 46' W.
12 m.—Latitude 32 49 N.; longitude 59 49 W.
8 p. m.—Latitude 32 46 N.; longitude 60 04 W.

Temperature of the air and the surface water—Continued.

NOVEMBER 7.

	Air.	Water surface.	Hour.	Air.	Water surface.
	°	°	P. M.	°	°
	71	73	1	75	72
	71	73	2	75	72
	71	73	3	75	72
	71	73	4	75	72
	70	73	5	75	72
	70	74	6	75	72
	70	73	7	75	72
	70	73	8	75	72
	70	73	9	75	72
	68	73	10	74	72
	68	73	11	74	72
	68	73	12	74	72

4 a. m.—Latitude 32° 32' N.; longitude 60° 16' W.
12 m.—Latitude 32 40 N.; longitude 60 14 W.
8 p. m.—Latitude 32 36 N.; longitude 60 26 W.

NOVEMBER 8.

	°	°	P. M.	°	°
	71	71	1	71	72
	71	71	2	71	72
	71	72	3	70	72
	71	72	4	70	72
	72	73	5	70	72
	72	73	6	70	73
	72	73	7	69	73
	72	73	8	68	73
	73	72	9	65	75
	73	72	10	65	73
	73	72	11	65	73
	73	72	12	65	73

4 a. m.—Latitude 32° 31' N.; longitude 60° 28' W.
12 m.—Latitude 32 36 N.; longitude 60 24 W.
8 p. m.—Latitude 32 39 N.; longitude 59 56 W.

NOVEMBER 9.

	°	°	P. M.	°	°
	67	73	1	70	73
	67	73	2	71	73
	67	73	3	71	73
	67	73	4	71	73
	67	73	5	71	73
	67	73	6	70	73
	68	72	7	68	73
	69	72	8	68	73
	68	72	9	68	73
	69	72	10	68	73
	70	73	11	68	73
	70	73	12	68	73

4 a. m.—Latitude 32° 37' N.; longitude 59° 45' W.
12 m.—Latitude 32 33 N.; longitude 59 22 W.
8 p. m.—Latitude 32 18 N.; longitude 59 04 W.

S. Doc. 59.

Temperature of the air and the surface water—Continued.

NOVEMBER 10.

Hour.	Air.	Water surface.	Hour.	Air.	W
A. M.	°	°	P. M.	°	su
1	69	73	1	73	
2	69	73	2	73	
3	69	73	3	73	
4	69	73	4	73	
5	69	73	5	69	
6	69	73	6	69	
7	70	72	7	69	
8	69	72	8	69	
9	69	72	9	68	
10	71	72	10	68	
11	71	73	11	68	
12	71	73	12	68	

4 a. m.—Latitude 32° 05' N.; longitude 58° 43' W.

12 m.—Latitude 32 14 N.; longitude 58 49 W.

8 p. m.—Latitude 32 12 N.; longitude 58 49 W.

NOVEMBER 11.

A. M.	°	°	P. M.	°
1	68	73	1	72
2	68	73	2	72
3	68	73	3	72
4	68	73	4	72
5	68	..	5	71
6	68	74	6	71
7	67	74	7	69
8	68	74	8	69
9	70	74	9	69
10	71	74	10	69
11	71	74	11	69
12	71	74	12	69

4 a. m.—Latitude 31° 54' N.; longitude 58° 30' W.

12 m.—Latitude 31 32 N.; longitude 57 52 W.

8 p. m.—Latitude 31 53 N.; longitude 58 25 W.

NOVEMBER 12.

A. M.	°	°	P. M.	°
1	69	73	1	70
2	69	73	2	70
3	69	73	3	69
4	69	73	4	69
5	69	73	5	68
6	69	73	6	68
7	70	73	7	67
8	71	73	8	67
9	68	73	9	66
10	68	73	10	65
11	68	73	11	63
12	68	73	12	61

4 a. m.—Latitude 31° 58' N.; longitude 58° 18' W.

12 m.—Latitude 32 07 N.; longitude 58 30 W.

8 p. m.—Latitude 31 56 N.; longitude 58 20 W.

Temperature of the air and the surface water—Continued.

NOVEMBER 13.

Hour.	Air.	Water surface.	Hour.	Air.	Water surface.
A. M.	°	°	P. M.	°	°
1	61	72	1	65	73
2	61	72	2	65	72
3	61	72	3	65	72
4	61	72	4	65	72
5	61	73	5	65	72
6	61	73	6	65	72
7	63	73	7	63	72
8	63	73	8	63	72
9	65	73	9	67	72
10	65	73	10	67	72
11	66	72	11	67	72
12	66	72	12	67	72

4 a. m.—Latitude 32° 02' N. ; longitude 58° 26' W.

12 m.—Latitude 32 06 N. ; longitude 58 41 W.

8 p. m.—Latitude 32 09 N. ; longitude 58 22 W.

NOVEMBER 14.

A. M.	°	°	P. M.	°	°
1	65	72	1	70	72
2	65	72	2	70	72
3	65	72	3	70	72
4	65	72	4	69	72
5	68	72	5	69	72
6	69	72	6	65	72
7	69	72	7	65	72
8	70	72	8	65	72
9	70	72	9	65	72
10	71	72	10	65	72
11	72	72	11	65	71
12	72	72	12	63	70

4 a. m.—Latitude 32° 13' N. ; longitude 58° 11' W.

12 m.—Latitude 32 09 N. ; longitude 57 52 W.

8 p. m.—Latitude 32 09 N. ; longitude 56 48 W.

NOVEMBER 15.

A. M.	°	°	P. M.	°	°
1	67	70	1	70	70
2	67	70	2	70	70
3	66	70	3	71	70
4	65	70	4	70	70
5	65	71	5	69	70
6	65	71	6	67	70
7	65	71	7	67	70
8	65	71	8	67	70
9	65	71	9	67	70
10	66	71	10	68	71
11	68	71	11	68	71
12	68	70	12	68	71

4 a. m.—Latitude 31° 36' N. ; longitude 55° 32' W.

12 m.—Latitude 31 31 N. ; longitude 54 03 W.

8 p. m.—Latitude 31 17 N. ; longitude 53 22 W.

Temperature of the air and the surface water—Continued.

NOVEMBER 16.

Hour.	Air.	Water surface.	Hour.	Air.	Water surface.
A. M.	°	°	P. M.	°	°
1	67	71	1	71	72
2	67	71	2	71	72
3	67	71	3	71	72
4	67	71	4	71	72
5	69	71	5	71	72
6	69	71	6	71	72
7	69	71	7	69	71
8	69	71	8	69	71
9	69	71	9	69	71
10	69	71	10	69	71
11	69	71	11	69	71
12	69	71	12	69	71

4 a. m.—Latitude 31° 05' N. ; longitude 53° 27' W.

12 m.—Latitude 31 08 N. ; longitude 53 28 W.

8 p. m.—Latitude 31 18 N. ; longitude 52 47 W.

NOVEMBER 17.

P. M.	°	°	A. M.	°	°
1	69	72	1	69	71
2	69	72	2	69	71
3	68	72	3	69	71
4	68	72	4	69	71
5	68	72	5	69	71
6	69	72	6	69	71
7	69	72	7	69	71
8	69	72	8	69	71
9	69	72	9	69	71
10	69	72	10	69	71
11	70	72	11	69	71
12	70	72	12	69	71

4 a. m.—Latitude 31° 19' N. ; longitude 51° 58' W.

12 m.—Latitude 31 05 N. ; longitude 50 59 W.

8 p. m.—Latitude 31 04 N. ; longitude 49 35 W.

NOVEMBER 18.

A. M.	°	°	P. M.	°	°
1	69	71	1	71	70
2	68	70	2	72	70
3	67	70	3	73	70
4	67	70	4	69	70
5	67	70	5	69	70
6	67	70	6	69	70
7	68	70	7	69	70
8	69	71	8	69	70
9	70	70	9	69	70
10	69	70	10	68	69
11	69	70	11	67	70
12	69	70	12	67	71

4 a. m.—Latitude 31° 04' N. ; longitude 48° 23' W.

12 m.—Latitude 30 59 N. ; longitude 47 26 W.

8 p. m.—Latitude 31 00 N. ; longitude 46 30 W.

Temperature of the air and the surface water—Continued.

NOVEMBER 19.

Hour.	Air.	Water surface.	Hour.	Air.	Water surface.
A. M.	°	°	P. M.	°	°
1	69	71	1	73	70
2	69	71	2	73	70
3	69	71	3	73	70
4	69	70	4	73	70
5	65	69	5	71	70
6	65	69	6	71	70
7	66	69	7	69	69
8	69	69	8	69	69
9	70	69	9	69	69
10	72	69	10	70	69
11	72	70	11	70	69
12	73	70	12	70	69

4 a. m.—Latitude 31° 01' N. ; longitude 45° 25' W.

12 m.—Latitude 31 02 N. ; longitude 44 21 W.

8 p. m.—Latitude 30 56 N. ; longitude 43 29 W.

NOVEMBER 20.

Hour.	°	°	P. M.	°	°
1	63	63	1	72	71
2	63	69	2	72	71
3	63	69	3	72	70
4	63	69	4	72	70
5	63	69	5	72	70
6	69	70	6	70	70
7	69	69	7	69	70
8	70	69	8	69	70
9	69	70	9	68	70
10	70	70	10	69	70
11	70	70	11	68	70
12	71	70	12	68	70

4 a. m.—Latitude 30° 32' N. ; longitude 42° 47' W.

12 m.—Latitude 29 52 N. ; longitude 42 13 W.

8 p. m.—Latitude 29 40 N. ; longitude 41 55 W.

NOVEMBER 21.

A. M.	°	°	P. M.	°	°
1	63	69	1	75	72
2	69	69	2	75	72
3	63	69	3	73	70
4	63	69	4	73	70
5	68	69	5	73	71
6	63	70	6	73	71
7	63	70	7	71	70
8	69	70	8	71	70
9	70	70	9	71	70
10	71	71	10	71	70
11	72	71	11	71	70
12	73	71	12	71	70

4 a. m.—Latitude 29° 20' N. ; longitude 41° 32' W.

12 m.—Latitude 29 05 N. ; longitude 41 27 W.

8 p. m.—Latitude 28 40 N. ; longitude 41 10 W.

Temperature of the air and the surface water—Continued.

NOVEMBER 22.

Hour.	Air.	Water surface.	Hour.	Air.	Water surface.
A. M.		°	P. M.	°	°
1	69	71	1	69	70
2	69	70	2	68	71
3	69	71	3	68	71
4	69	70	4	68	71
5	69	71	5	69	71
6	69	71	6	69	71
7	69	71	7	69	71
8	70	71	8	69	71
9	70	71	9	69	71
10	70	71	10	69	72
11	71	71	11	69	72
12	71	71	12	69	71

4 a. m.—Latitude 28° 22' N.; longitude 40° 56' W.

12 m.—Latitude 27 53 N.; longitude 40 32 W.

8 p. m.—Latitude 27 35 N.; longitude 40 09 W.

NOVEMBER 23.

A. M.	°	°	P. M.	°	°
1	68	72	1	75	73
2	68	73	2	75	73
3	68	73	3	75	73
4	67	73	4	75	73
5	67	73	5	73	74
6	68	73	6	71	73
7	68	74	7	67	72
8	68	73	8	67	72
9	69	73	9	68	71
10	71	73	10	68	71
11	74	73	11	67	71
12	74	73	12	67	71

4 a. m.—Latitude 27° 07' N.; longitude 39° 22' W.

12 m.—Latitude 26 44 N.; longitude 38 40 W.

8 p. m.—Latitude 26 28 N.; longitude 38 15 W.

NOVEMBER 24.

A. M.	°	°	P. M.	°	°
1	68	72	1	77	74
2	68	73	2	77	74
3	69	73	3	77	74
4	69	73	4	73	74
5	69	73	5	73	74
6	69	74	6	73	73
7	70	74	7	73	73
8	70	74	8	71	73
9	70	74	9	71	73
10	70	74	10	71	73
11	71	74	11	69	73
12	73	74	12	69	73

4 a. m.—Latitude 26° 06' N.; longitude 37° 50' W.

12 m.—Latitude 25 25 N.; longitude 37 49 W.

8 p. m.—Latitude 25 34 N.; longitude 37 30 W.

Temperature of the air and the surface water—Continued.

NOVEMBER 25.

Hour.	Air.	Water surface.	Hour.	Air.	Water surface.
A. M.	°	°	P. M.	°	°
1	72	73	1	74	74
2	72	72	2	73	74
3	72	72	3	73	73
4	72	72	4	73	73
5	72	74	5	73	73
6	72	74	6	73	73
7	72	74	7	72	74
8	73	74	8	72	74
9	73	74	9	72	74
10	73	74	10	71	74
11	74	74	11	71	74
12	73	74	12	71	74

4 a. m.—Latitude 25° 30' N.; longitude 37° 20' W.

12 m.—Latitude 25 30 N.; longitude 37 29 W.

8 p. m.—Latitude 25 25 N.; longitude 37 40 W.

NOVEMBER 26.

A. M.	°	°	P. M.	°	°
1	71	74	1	75	74
2	71	73	2	75	74
3	71	73	3	75	74
4	71	73	4	73	73
5	71	73	5	70	73
6	71	73	6	70	73
7	71	73	7	70	73
8	71	73	8	70	73
9	74	74	9	70	73
10	74	73	10	70	73
11	71	73	11	70	73
12	71	72	12	70	73

4 a. m.—Latitude 25° 27' N.; longitude 37° 43' W.

12 m.—Latitude 25 30 N.; longitude 37 42 W.

8 p. m.—Latitude 25 32 N.; longitude 37 59 W.

NOVEMBER 27.

A. M.	°	°	P. M.	°	°
1	71	73	1	75	74
2	71	74	2	75	74
3	71	74	3	75	74
4	71	74	4	75	74
5	71	73	5	75	74
6	71	73	6	74	74
7	71	73	7	73	73
8	71	74	8	73	73
9	74	74	9	72	73
10	75	74	10	72	73
11	74	74	11	72	73
12	74	74	12	72	73

4 a. m.—Latitude 25° 28' N.; longitude 37° 56' W.

12 m.—Latitude 25 33 N.; longitude 38 05 W.

8 p. m.—Latitude 25 22 N.; longitude 37 31 W.

Temperature of the air and the surface water—Continued.

NOVEMBER 28.

Hour.	Air.	Water surface.	Hour.	Air.	Water surface.
A. M.	°	°	P. M.	°	°
1	72	72	1	79	74
2	72	72	2	79	74
3	72	72	3	79	74
4	72	72	4	79	74
5	71	74	5	77	75
6	71	74	6	75	75
7	71	74	7	75	75
8	72	75	8	75	75
9	73	74	9	73	74
10	74	74	10	71	74
11	75	75	11	71	74
12	75	75	12	71	74

4 a. m.—Latitude 25° 10' N.; longitude 36° 52' W.

12 m.—Latitude 25 05 N.; longitude 36 18 W.

8 p. m.—Latitude 24 57 N.; longitude 35 43 W.

NOVEMBER 29.

A. M.	°	°	P. M.	°	°
1	73	73	1	76	75
2	73	73	2	77	75
3	73	73	3	77	75
4	73	73	4	77	75
5	73	74	5	76	75
6	73	74	6	76	75
7	73	74	7	74	74
8	73	73	8	74	74
9	73	74	9	73	74
10	73	74	10	73	74
11	75	74	11	73	74
12	75	75	12	73	74

4 a. m.—Latitude 24° 46' N.; longitude 34° 43' W.

12 m.—Latitude 24 27 N.; longitude 33 59 W.

8 p. m.—Latitude 23 57 N.; longitude 33 29 W.

NOVEMBER 30.

A. M.	°	°	P. M.	°	°
1	71	74	1	76	77
2	71	74	2	76	77
3	70	73	3	77	77
4	70	73	4	73	77
5	70	73	5	73	77
6	70	73	6	73	77
7	72	73	7	73	77
8	74	73	8	72	76
9	75	74	9	71	75
10	75	75	10	71	75
11	75	77	11	71	75
12	75	77	12	71	75

4 a. m.—Latitude 23° 43' N.; longitude 32° 41' W.

12 m.—Latitude 23 41 N.; longitude 32 39 W.

8 p. m.—Latitude 23 41 N.; longitude 32 39 W.

Temperature of the air and the surface water—Continued.

DECEMBER 1.

Hour.	Air.	Water surface.	Hour.	Air.	Water surface.
A. M.	°	°	P. M.	°	°
1	73	75	1	78	75
2	73	75	2	78	75
3	73	75	3	79	75
4	73	75	4	79	76
5	73	75	5	77	76
6	73	75	6	75	75
7	74	75	7	71	75
8	75	77	8	71	75
9	76	77	9	71	75
10	77	77	10	71	75
11	77	77	11	70	75
12	77	77	12	70	75

4 a. m.—Latitude 23° 26' N.; longitude 32° 25' W.

12 m.—Latitude 23 10 N.; longitude 32 24 W.

8 p. m.—Latitude 23 17 N.; longitude 32 33 W.

DECEMBER 2.

A. M.	°	°	P. M.	°	°
1	70	75	1	76	75
2	70	75	2	76	75
3	70	75	3	78	76
4	70	75	4	77	75
5	71	75	5	75	75
6	73	75	6	75	75
7	74	75	7	75	75
8	75	75	8	74	75
9	76	77	9	73	74
10	73	75	10	73	74
11	73	74	11	73	74
12	73	74	12	73	74

4 a. m.—Latitude 23° 22' N.; longitude 32° 24' W.

12 m.—Latitude 23 20 N.; longitude 32 15 W.

8 p. m.—Latitude 23 41 N.; longitude 32 05 W.

DECEMBER 3.

A. M.	°	°	P. M.	°	°
1	73	74	1	75	75
2	73	74	2	75	75
3	72	74	3	75	75
4	72	74	4	76	75
5	74	75	5	76	75
6	75	75	6	76	75
7	75	75	7	76	75
8	75	75	8	76	74
9	75	75	9	73	75
10	75	75	10	73	75
11	77	75	11	73	75
12	77	75	12	71	75

4 a. m.—Latitude 24° 04' N.; longitude 32° 24' W.

12 m.—Latitude 24 09 N.; longitude 32 13 W.

8 p. m.—Latitude 23 46 N.; longitude 31 53 W.

Temperature of the air and the surface water—Continued.

DECEMBER 4.

Hour.	Air.	Water surface.	Hour.	Air.	Water surface.
A. M.	°	°	P. M.	°	°
1	72	75	1	75	75
2	72	75	2	75	75
3	71	75	3	75	75
4	71	75	4	74	75
5	73	75	5	72	75
6	73	75	6	72	74
7	74	75	7	72	74
8	75	75	8	72	74
9	75	75	9	73	75
10	75	75	10	73	75
11	76	75	11	73	75
12	76	75	12	73	75

4 a. m.—Latitude 23° 28' N.; longitude 31° 23' W.

12 m.—Latitude 23 00 N.; longitude 30 48 W.

8 p. m.—Latitude 22 36 N.; longitude 30 16 W.

DECEMBER 5.

A. M.	°	°	P. M.	°	°
1	73	75	1	76	75
2	73	75	2	76	75
3	73	75	3	76	75
4	73	75	4	76	75
5	72	75	5	76	75
6	72	75	6	75	75
7	74	75	7	74	75
8	75	75	8	73	75
9	75	75	9	73	75
10	77	75	10	72	75
11	76	75	11	72	75
12	77	75	12	72	75

4 a. m.—Latitude 21° 59' N.; longitude 29° 39' W.

12 m.—Latitude 21 30 N.; longitude 29 12 W.

8 p. m.—Latitude 20 58 N.; longitude 28 38 W.

DECEMBER 6.

A. M.	°	°	P. M.	°	°
1	73	75	1	76	75
2	73	75	2	76	75
3	73	75	3	75	75
4	73	75	4	75	75
5	72	75	5	75	75
6	73	75	6	75	75
7	75	75	7	73	75
8	75	75	8	73	75
9	73	75	9	72	75
10	73	75	10	72	75
11	73	75	11	72	75
12	73	75	12	72	75

4 a. m.—Latitude 20° 22' N.; longitude 28° 02' W.

12 m.—Latitude 20 02 N.; longitude 27 34 W.

8 p. m.—Latitude 19 32 N.; longitude 26 45 W.

Temperature of the air and the surface water—Continued.

DECEMBER 7.

Hour.	Air.	Water surface.	Hour.	Air.	Water surface.
A. M.	°	°	P. M.	°	°
1	73	75	1	77	75
2	73	75	2	75	75
3	73	75	3	75	75
4	73	75	4	75	75
5	73	75	5	75	75
6	73	75	6	74	75
7	74	75	7	73	75
8	74	75	8	73	75
9	75	75	9	73	75
10	75	75	10	73	75
11	78	75	11	73	75
12	78	75	12	73	75

4 a. m.—Latitude 18° 57' N. ; longitude 26° 04' W.

12 m.—Latitude 18 39 N. ; longitude 25 26 W.

8 p. m.—Latitude 18 20 N. ; longitude 25 04 W.

DECEMBER 8.

A. M.	°	°	P. M.	°	°
1	71	75	1	74	75
2	71	75	2	74	75
3	71	75	3	75	75
4	71	75	4	75	75
5	71	75	5	74	75
6	72	75	6	73	75
7	74	75	7	73	75
8	74	75	8	73	75
9	74	75	9	73	75
10	74	75	10	73	75
11	74	75	11	73	75
12	74	75	12	73	75

4 a. m.—Latitude 17° 45' N. ; longitude 24° 18' W.

12 m.—Latitude 17 53 N. ; longitude 24 15 W.

8 p. m.—Latitude 17 36 N. ; longitude 23 33 W.

DECEMBER 9.

A. M.	°	°	P. M.	°	°
1	73	75	1	79	75
2	73	75	2	79	75
3	73	75	3	79	75
4	73	75	4	77	75
5	73	75	5	75	75
6	73	75	6	74	75
7	73	75	7	73	74
8	74	75	8	73	74
9	75	75	9	73	74
10	76	75	10	73	75
11	77	75	11	73	74
12	78	75	12	73	74

4 a. m.—Latitude 17° 37' N. ; longitude 23° 36' W.

12 m.—Latitude 18 22 N. ; longitude 24 11 W.

8 p. m.—Latitude 18 47 N. ; longitude 24 24 W.

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Temperature of the air and the surface water—Continued

DECEMBER 10.

Mr.	Air.	Water surface.	Hour.	Air.
. M.	o	o	P. M.	o
1	74	75	1	76
2	74	75	2	76
3	74	75	3	76
4	74	75	4	76
5	74	75	5	75
6	74	75	6	74
7	74	75	7	74
8	75	75	8	74
9	73	75	9	71
10	73	75	10	71
11	73	75	11	71
12	75	75	12	71

4 a. m.—Latitude 18° 11' N.; longitude 23° 56' W.
12 m.—Latitude 18 11 N.; longitude 23 45 W.
8 p. m.—Latitude 17 42 N.; longitude 23 10 W.

DECEMBER 11.

A. M.	o	o	P. M.	o
1	71	75	1	73
2	71	75	2	73
3	71	75	3	73
4	71	75	4	73
5	71	75	5	73
6	72	75	6	73
7	73	75	7	73
8	73	75	8	73
9	73	75	9	73
10	75	75	10	73
11	75	75	11	73
12	75	75	12	73

4 a. m.—Latitude 17° 49' N.; longitude 23° 11' W.
12 m.—Latitude 17 27 N.; longitude 22 43 W.
8 p. m.—Latitude 16 52 N.; longitude 22 03 W.

DECEMBER 12.

A. M.	o	o	P. M.	o
1	73	75	1	71
2	73	75	2	7
3	71	74	3	7
4	71	74	4	7
5	71	74	5	.
6	71	74	6	.
7	71	74	7	.
8	74	74	8	.
9	73	74	9	.
10	73	75	10	.
11	73	75	11	.
12	75	75	12	.

4 a. m.—Latitude 16° 24' N.; longitude 21° 28'
12 m.—Latitude 15 58 N.; longitude 20 50
8 p. m.—Latitude 16 37 N.; longitude 20 56

Temperature of the air and the surface water—Continued.

DECEMBER 13.

Hour.	Air.	Water surface.	Hour.	Air.	Water surface.
A. M.	°	°	P. M.	°	°
1	73	74	1	80	75
2	72	74	2	80	75
3	72	74	3	79	75
4	72	75	4	79	75
5	72	75	5	77	75
6	72	75	6	75	75
7	73	75	7	73	74
8	73	75	8	71	74
9	73	75	9	71	74
10	74	75	10	71	74
11	74	75	11	71	74
12	74	75	12	71	74

4 a. m.—Latitude 16° 32' N.; longitude 20° 49' W.

12 m.—Latitude 16 29 N.; longitude 20 56 W.

8 p. m.—Latitude 16 23 N.; longitude 20 54 W.

DECEMBER 14.

A. M.	°	°	P. M.	°	°
1	71	74	1	76	75
2	71	74	2	76	74
3	72	73	3	76	74
4	72	73	4	76	74
5	72	74	5	75	73
6	72	75	6	74	73
7	74	75	7	73	74
8	75	75	8	73	73
9	76	75	9	72	73
10	77	75	10	71	74
11	77	75	11	71	74
12	77	75	12	71	74

4 a. m.—Latitude 16° 18' N.; longitude 20° 35' W.

12 m.—Latitude 16 33 N.; longitude 20 54 W.

8 p. m.—Latitude 16 58 N.; longitude 21 29 W.

DECEMBER 15.

A. M.	°	°	P. M.	°	°
1	71	74	1	77	74
2	71	74	2	77	74
3	71	74	3	77	74
4	71	74	4	76	74
5	71	74	5	76	74
6	73	73	6	76	74
7	75	73	7	74	73
8	75	73	8	73	73
9	77	73	9	73	73
10	77	73	10	73	75
11	77	74	11	73	75
12	77	74	12	73	75

4 a. m.—Latitude 16° 45' N.; longitude 21° 16' W.

12 m.—Latitude 17 00 N.; longitude 21 36 W.

8 p. m.—Latitude 16 37 N.; longitude 22 03 W.

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Temperature of the air and the surface water—Continued.

DECEMBER 16.

Hour.	Air.	Water surface.	Hour.	Air.
A. M.	°	°	P. M.	°
1	72	75	1	77
2	72	74	2	77
3	72	75	3	75
4	72	75	4	75
5	71	74	5	73
6	71	74	6	73
7	71	74	7	76
8	75	75	8	75
9	77	75	9	74
10	77	75	10	73
11	77	75	11	73
12	77	75	12	73

4 a. m.—Latitude 15° 37' N.; longitude 21° 51' W.

12 m.—Latitude 15 07 N.; longitude 22 00 W.

8 p. m.—Latitude 15 11 N.; longitude 22 37 W.

DECEMBER 17.

A. M.	°	°	P. M.	°
1	73	75	1	..
2	73	75	2	..
3	73	75	3	..
4	73	75	4	..
5	71	73	5	..
6	71	73	6	..
7	73	73	7	..
8	75	73	8	..
9	75	73	9	..
10	77	73	10	..
11	78	73	11	..
12	78	73	12	..

4 a. m.—Latitude 15° 05' N.; longitude 22° 23' W.

12 m.—Latitude 15 03 N.; longitude 23 10 W

8 p. m.—Porto Praya.

Temperature of the air and the surface water—Continued.

PORTO PRAYA.

	Dec. 18.		Dec. 19.		Dec. 20.		Dec. 21.		Dec. 22.		Dec. 23.		Dec. 24.		Dec. 25.	
	Air.	Water.	Air.	Water.	Air.	Water.	Air.	Water.	Air.	Water.	Air.	Water.	Air.	Water.	Air.	Water.
	°	°	°	°	°	°	°	°	°	°	°	°	°	°	°	°
4 a. m.....	77	..	78	..	71	75	75	75	71	75	73	75	78	75	78	75
8 a. m.....	77	..	75	..	78	75	75	75	72	75	77	..	74	75	78	75
Noon.....	79	..	77	..	75	75	75	75	77	..	79	..	79	75	79	75
4 p. m.....	79	..	77	75	77	75	77	75	77	75	79	75	76	75	77	75
8 p. m.....	75	..	75	75	76	75	75	75	77	75	76	75	76	75	77	75
Midnight.....	78	..	71	75	71	75	78	75	78	75	78	75	78	75	76	75

PORTO PRAYA—Continued.

	Dec. 26.		Dec. 27.		Dec. 28.		Dec. 29.		Dec. 30.		Dec. 31.		Jan. 1.		Jan. 2.	
	Air.	Water.	Air.	Water.	Air.	Water.	Air.	Water.	Air.	Water.	Air.	Water.	Air.	Water.	Air.	Water.
	°	°	°	°	°	°	°	°	°	°	°	°	°	°	°	°
4 a. m.....	78	75	78	75	78	75	78	75	71	75	78	75	71	75	71	75
8 a. m.....	75	75	74	75	78	75	75	75	75	75	78	75	78	75	78	75
Noon.....	79	75	81	75	77	75	78	75	77	75	79	75	79	75	77	75
4 p. m.....	79	..	79	75	77	75	78	75	77	75	88	75	81	75	77	75
8 p. m.....	76	..	77	75	78	75	77	75	78	75	78	75	75	75	75	75
Midnight.....	78	..	78	75	78	75	74	75	71	75	71	75	78	75	78	..

Temperature of the air and the surface water—Continued.
JANUARY 3.

Hour.	Air.	Water surface.	Hour.	Air.	V st
A. M.	o	o	P. M.	o	
1	72	..	1	83	
2	73	..	2	83	
3	74	..	3	83	
4	75	..	4	82	
5	75	75	5	79	
6	76	..	6	77	
7	77	..	7	77	
8	77	75	8	77	
9	78	75	9	77	
10	79	75	10	76	
11	79	75	11	76	
12	79	75	12	75	

4 a. m.—Porto Praya.
12 m.—Latitude 14° 46' N.; longitude 23° 56' W.
8 p. m.—Latitude 14 47 N.; longitude 24 23 W.

JANUARY 4.

A. M.	o	o	P. M.	o
1	75	75	1	83
2	75	75	2	83
3	75	75	3	83
4	75	75	4	83
5	73	75	5	83
6	73	75	6	77
7	75	75	7	75
8	75	75	8	71?
9	77	75	9	75
10	79	75	10	75
11	81	75	11	73
12	83	75	12	73

4 a. m.—Off Fogo island.
12 m.—Off Fogo island.
8 p. m.—Off Fogo island.

JANUARY 5.

A. M.	o	o	P. M.	o
1	73	75	1	77
2	73	75	2	77
3	73	75	3	77
4	73	75	4	77
5	74	75	5	76
6	75	75	6	76
7	77	75	7	75
8	77	75	8	75
9	78	75	9	73
10	78	75	10	73
11	79	75	11	73
12	79	75	12	73

4 a. m.—Off Brava island.
12 m.—Off Brava island.
8 p. m.—Latitude 14° 33' N.; longitude 24° 22' W.

Temperature of the air and the surface water—Continued.

JANUARY 6.

Hour.	Air.	Water surface.	Hour.	Air.	Water surface.
A. M.	○	○	P. M.	○	○
1	71	74	1	75	74
2	71	74	2	76	74
3	71	74	3	76	74
4	72	74	4	76	75
5	72	74	5	76	75
6	73	74	6	75	75
7	73	74	7	75	75
8	73	73	8	75	75
9	73	73	9	75	75
10	73	74	10	75	75
11	75	75	11	75	75
12	77	75	12	75	75

4 a. m.—Latitude 13° 38' N.; longitude 23° 38' W.

12 m.—Latitude 13 01 N.; longitude 22 58 W.

8 p. m.—Latitude 12 09 N.; longitude 22 25 W.

JANUARY 7.

A. M.	○	○	P. M.	○	○
1	74	75	1	77	75
2	74	75	2	77	77
3	74	75	3	78	77
4	74	75	4	79	77
5	74	75	5	79	77
6	75	75	6	77	77
7	75	75	7	76	76
8	77	75	8	76	76
9	76	75	9	77	76
10	77	75	10	75	77
11	77	75	11	75	77
12	77	75	12	75	77

4 a. m.—Latitude 11° 19' N.; longitude 22° 02' W.

12 m.—Latitude 10 37 N.; longitude 21 43 W.

8 p. m.—Latitude 9 45 N.; longitude 21 22 W.

JANUARY 8.

A. M.	○	○	P. M.	○	○
1	75	77	1	85	79
2	75	77	2	85	79
3	75	77	3	85	79
4	75	77	4	83	79
5	76	77	5	81	78
6	77	77	6	81	78
7	77	77	7	77	77
8	77	78	8	75	77
9	80	77	9	77	78
10	73	78	10	77	78
11	73	78	13	77	78
12	73	78	12	77	78

4 a. m.—Latitude 9° 05' N.; longitude 21° 05' W.

12 m.—Latitude 8 43 N.; longitude 20 52 W.

8 p. m.—Latitude 7 59 N.; longitude 20 33 W.

Temperature of the air and the surface water—Continued

JANUARY 9.

Hour.	Air.	Water surface.	Hour.	Air.
A. M.	°	°	P. M.	°
1	76	78	1	..
2	76	78	2	..
3	76	78	3	81
4	76	78	4	81
5	76	78	5	81
6	77	78	6	79
7	77	78	7	81
8	79	78	8	80
9	83	78	9	79
10	83	78	10	79
11	83	79	11	79
12	83	79	12	77

4 a. m.—Latitude $7^{\circ} 25'$ N.; longitude $20^{\circ} 11'$ W.12 m.—Latitude $7^{\circ} 15'$ N.; longitude $20^{\circ} 07'$ W.8 p. m.—Latitude $6^{\circ} 47'$ N.; longitude $20^{\circ} 00'$ W.

JANUARY 10.

A. M.	°	°	P. M.	°
1	77	79	1	83
2	77	79	2	85
3	77	79	3	85
4	77	79	4	85
5	79	79	5	85
6	79	79	6	81
7	79	79	7	80
8	81	79	8	79
9	83	79	9	78
10	83	79	10	77
11	83	80	11	77
12	83	80	12	76

4 a. m.—Latitude $6^{\circ} 01'$ N.; longitude $19^{\circ} 46'$ W.12 m.—Latitude $5^{\circ} 43'$ N.; longitude $19^{\circ} 37'$ W.8 p. m.—Latitude $5^{\circ} 33'$ N.; longitude $19^{\circ} 34'$ W.

JANUARY 11.

A. M.	°	°	P. M.	°
1	79	79	1	83
2	77	79	2	83
3	77	79	3	85
4	77	79	4	85
5	77	79	5	85
6	77	79	6	84
7	77	79	7	83
8	79	79	8	83
9	81	79	9	81
10	81	79	10	81
11	81	79	11	79
12	82	79	12	79

4 a. m.—Latitude $4^{\circ} 46'$ N.; longitude $19^{\circ} 30'$ W.12 m.—Latitude $4^{\circ} 33'$ N.; longitude $19^{\circ} 24'$ W.8 p. m.—Latitude $4^{\circ} 25'$ N.; longitude $19^{\circ} 20'$ W.

Temperature of the air and the surface water—Continued.

JANUARY 12.

Hour.	Air.	Water surface.	Hour.	Air.	Water surface.
A. M.	°	°	P. M.	°	°
1	78	79	1	83	80
2	78	79	2	83	81
3	77	79	3	83	81
4	76	79	4	82	81
5	77	79	5	81	81
6	77	79	6	81	79
7	77	79	7	81	80
8	77	79	8	81	80
9	79	80	9	78	81
10	79	80	10	77	81
11	81	79	11	77	80
12	81	80	12	77	80

4 a. m.—Latitude 4° 07' N.; longitude 19° 14' W.

12 m.—Latitude 4° 05' N.; longitude 19° 12' W.

8 p. m.—Latitude 4° 06' N.; longitude 19° 15' W.

JANUARY 13.

A. M.	°	°	P. M.	°	°
1	79	80	1	75	78
2	79	79	2	77	78
3	79	79	3	77	78
4	79	79	4	77	78
5	..	79	5	77	78
6	..	79	6	77	78
7	..	81?	7	72	78
8	75	81?	8	72	78
9	75	77	9	75	79
10	75	77	10	75	79
11	75	77	11	75	79
12	75	77	12	75	79

4 a. m.—Latitude 4° 08' N.; longitude 19° 18' W.

12 m.—Latitude 4° 15' N.; longitude 19° 19' W.

8 p. m.—Latitude 4° 12' N.; longitude 19° 20' W.

JANUARY 14.

A. M.	°	°	P. M.	°	°
1	75	79	1	87	81
2	75	79	2	87	81
3	75	79	3	87	81
4	75	79	4	87	79
5	77	79	5	85	79
6	77	79	6	81	79
7	79	80	7	80	79
8	81	80	8	80	79
9	81	80	9	77	80
10	83	80	10	77	79
11	83	80	11	77	79
12	83	80	12	76	79

4 a. m.—Latitude 3° 50' N.; longitude 19° 13' W.

12 m.—Latitude 3° 45' N.; longitude 19° 07' W.

8 p. m.—Latitude 3° 41' N.; longitude 19° 05' W.

Temperature of the air and the surface water—Continued.

JANUARY 15.

Hour.	Air.	Water surface.	Hour.	Air.	W- sur
A. M.	○	○	P. M.	○	○
1	79	80	1	87	81
2	79	80	2	87	81
3	79	79	3	85	81
4	79	79	4	85	81
5	77	79	5	85	82
6	77	79	6	85	82
7	77	79	7	81	81
8	77	79	8	80	79
9	81	79	9	81	80
10	86	80	10	81	80
11	86	80	11	81	80
12	87	80	12	81	89

4 a. m.—Latitude 30° 51' N.; longitude 19° 06' W.
 12 m.—Latitude 3 51 N.; longitude 19 05 W.
 8 p. m.—Latitude 3 45 N.; longitude 19 02 W.

JANUARY 16.

A. M.	○	○	P. M.	○	○
1	80	80	1	81	79
2	77	79	2	81	79
3	77	79	3	79	79
4	77	79	4	78	79
5	78	79	5	78	80
6	79	80	6	77	79
7	81	80	7	77	80
8	80	80	8	77	80
9	81	80	9	77	80
10	81	80	10	77	79
11	81	80	11	77	79
12	81	80	12	77	79

4 a. m.—Latitude 30° 32' N.; longitude 18° 40' W.
 12 m.—Latitude 3 12 N.; longitude 18 35 W.
 8 p. m.—Latitude 3 02 N.; longitude 18 50 W.

JANUARY 17.

A. M.	○	○	P. M.	○	○
1	77	79	1	84	80
2	77	79	2	85	81
3	77	79	3	86	81
5	77	79	4	86	81
5	77	79	5	85	82
6	78	79	6	84	82
7	78	80	7	81	81
8	78	80	8	81	81
9	80	80	9	81	81
10	83	80	10	81	81
	83	80	11	81	81
	83	80	12	81	81

4 a. m.—Latitude 30° 02' N.; longitude 18° 37' W.
 12 m.—Latitude 3 02 N.; longitude 18 35 W.
 8 p. m.—Latitude 3 00 N.; longitude 18 34 W.

Temperature of the air and the surface water—Continued.

JANUARY 18.

Hour.	Air.	Water surface.	Hour.	Air.	Water surface.
A. M.	°	°	P. M.	°	°
1	79	80	1	84	81
2	79	80	2	83	81
3	77	80	3	83	81
4	77	80	4	81	81
5	78	80	5	81	81
6	78	80	6	81	82
7	79	79	7	80	80
8	82	80	8	80	80
9	83	80	9	79	81
10	83	80	10	79	80
11	83	80	11	78	80
12	84	80	12	77	80

4 a. m.—Latitude 30° 00' N.; longitude 18° 43' W.

12 m.—Latitude 2° 42' N.; longitude 19° 07' W.

8 p. m.—Latitude 2° 34' N.; longitude 19° 27' W.

JANUARY 19.

A. M.	°	°	P. M.	°	°
1	79	80	1	83	80
2	79	80	2	83	80
3	79	79	3	83	80
4	79	79	4	82	80
5	78	79	5	82	80
6	79	79	6	81	80
7	80	79	7	81	79
8	81	80	8	79	80
9	83	80	9	79	80
10	82	80	10	79	80
11	82	80	11	70	80
12	82	80	12	79	80

4 a. m.—Latitude 20° 20' N.; longitude 19° 51' W.

12 m.—Latitude 2° 15' N.; longitude 20° 11' W.

8 p. m.—Latitude 1° 50' N.; longitude 20° 14' W.

JANUARY 20.

A. M.	°	°	P. M.	°	°
1	79	79	1	82	79
2	78	79	2	82	79
3	78	79	3	82	79
4	78	79	4	82	79
5	78	79	5	81	79
6	78	79	6	81	79
7	79	79	7	80	79
8	81	79	8	79	80
9	82	79	9	79	79
10	83	80	10	78	79
11	83	80	11	77	79
12	83	80	12	77	79

4 a. m.—Latitude 10° 34' N.; longitude 20° 51' W.

12 m.—Latitude 0° 40' N.; longitude 21° 29' W.

8 p. m.—Latitude 0° 21' N.; longitude 21° 48' W.

Temperature of the air and the surface water—Continued.

JANUARY 21.

Hour.	Air.	Water surface.	Hour.	Air.	Water surface.
A. M.	°	°	P. M.	°	°
1	79	79	1	81	79
2	79	79	2	81	79
3	79	79	3	81	79
4	78	79	4	81	79
5	78	79	5	81	78
6	78	79	6	81	78
7	78	78	7	80	79
8	79	78	8	80	78
9	81	78	9	79	79
10	83	78	10	79	78
11	83	78	11	79	78
12	83	79	12	79	78

4 a. m.—Latitude 0° 05' S.; longitude 22° 26' W.

12 m.—Latitude 0 34 S.; longitude 22 48 W.

8 p. m.—Latitude 1 14 S.; longitude 23 01 W.

JANUARY 22.

A. M.	°	°	P. M.	°	°
1	78	78	1	82	78
2	78	78	2	81	78
3	77	78	3	81	78
4	77	78	4	82	79
5	77	78	5	81	78
6	78	78	6	80	78
7	78	78	7	80	78
8	79	78	8	79	78
9	83	78	9	79	78
10	83	78	10	79	78
11	83	78	11	78	78
12	83	78	12	77	78

4 a. m.—Latitude 2° 01' S.; longitude 23° 20' W.

12 m.—Latitude 2 28 S.; longitude 23 41 W.

8 p. m.—Latitude 2 57 S.; longitude 24 00 W.

JANUARY 23.

A. M.	°	°	P. M.	°	°
1	79	78	1	81	79
2	79	78	2	81	79
3	79	78	3	81	79
4	79	78	4	81	79
5	77	78	5	81	78
6	78	78	6	81	78
7	79	78	7	77	78
8	79	78	8	79	78
9	79	78	9	79	78
10	81	78	10	79	78
11	83	79	11	79	78
12	83	79	12	79	78

4 a. m.—Latitude 3° 40' S.; longitude 24° 36' W.

12 m.—Latitude 4 06 S.; longitude 24 52 W.

8 p. m.—Latitude 4 43 S.; longitude 25 14 W.

Temperature of the air and the surface water—Continued.

JANUARY 24.

Hour.	Air.	Water surface.	Hour.	Air.	Water surface.
A. M.	°	°	P. M.	°	°
1	78	78	1	80	78
2	78	78	2	80	78
3	78	78	3	81	78
4	78	78	4	81	78
5	78	78	5	81	78
6	78	78	6	80	78
7	78	78	7	79	78
8	78	78	8	79	78
9	81	78	9	77	78
10	83	78	10	77	78
11	83	78	11	77	78
12	83	78	12	77	78

4 a. m.—Latitude 5° 20' S.; longitude 25° 31' W.

12 m.—Latitude 5 42 S.; longitude 25 46 W.

8 p. m.—Latitude 6 18 S.; longitude 25 49 W.

JANUARY 25.

A. M.	°	°	P. M.	°	°
1	78	78	1	83	79
2	78	78	2	83	79
3	78	78	3	83	79
4	78	78	4	82	79
5	78	77	5	80	79
6	78	78	6	80	79
7	79	78	7	78	78
8	79	78	8	79	78
9	82	78	9	79	78
10	84	78	10	79	78
11	83	78	11	78	78
12	83	78	12	78	78

4 a. m.—Latitude 6° 53' S.; longitude 25° 47' W.

12 m.—Latitude 7 00 S.; longitude 25 44 W.

8 p. m.—Latitude 6 21 S.; longitude 25 23 W.

JANUARY 26.

A. M.	°	°	P. M.	°	°
1	77	78	1	83	79
2	77	78	2	83	79
3	77	78	3	82	79
4	77	78	4	82	79
5	78	78	5	81	79
6	79	78	6	81	78
7	79	78	7	80	78
8	81	78	8	80	78
9	82	79	9	80	78
10	83	79	10	79	77
11	83	79	11	79	77
12	83	79	12	79	77

4 a. m.—Latitude 5° 49' S.; longitude 25° 06' W.

12 m.—Latitude 5 10 S.; longitude 24 41 W.

8 p. m.—Latitude 4 43 S.; longitude 24 13 W.

Temperature of the air and the surface water—Continued.

JANUARY 27.

Hour.	Air.	Water surface.	Hour.	Air.	Water surface.
A. M.	°	°	P. M.	°	°
1	78	78	1	84	80
2	78	78	2	84	80
3	78	78	3	84	80
4	78	78	4	84	79
5	78	78	5	83	79
6	79	78	6	83	79
7	82	78	7	84	79
8	83	78	8	81	79
9	84	79	9	80	79
10	87	79	10	80	79
11	87	79	11	80	79
12	87	79	12	80	79

4 a. m.—Latitude 4° 19' S ; longitude 24° 05' W.

12 m.—Latitude 4 12 S. ; longitude 24 05 W.

8 p. m.—Latitude 4 35 S.; longitude 24 03 W.

JANUARY 28.

A. M.	°	°	P. M.	°	°
1	80	78	1	88	79
2	80	78	2	88	79
3	80	78	3	88	79
4	80	78	4	86	79
5	80	79	5	84	79
6	81	78	6	83	79
7	82	78	7	82	79
8	83	78	8	82	79
9	84	79	9	82	79
10	86	79	10	82	78
11	87	79	11	81	78
12	88	79	12	80	78

4 a. m.—Latitude 5° 11' S. ; longitude 24° 19' W.

12 m.—Latitude 4 37 S. ; longitude 23 49 W.

8 p. m.—Latitude 4 09 S. ; longitude 23 21 W.

JANUARY 29.

A. M.	°	°	P. M.	°	°
1	80	78	1	89	80
2	79	79	2	89	80
3	80	79	3	89	80
4	80	79	4	86	80
5	80	78	5	84	79
6	81	78	6	83	79
7	82	78	7	82	79
8	83	78	8	82	79
9	84	78	9	82	79
10	86	79	10	81	79
11	88	79	11	81	79
12	90	79	12	82	79

4 a. m.—Latitude 3° 44' S. ; longitude 23° 03' W.

12 m.—Latitude 3 33 S. ; longitude 22 41 W.

8 p. m.—Latitude 3 17 S. ; longitude 22 07 W.

Temperature of the air and the surface water—Continued.

JANUARY 30.

	Air.	Water surface.	Hour.	Air.	Water surface.
	°	°	P. M.	°	°
	82	79	1	90	79
	82	79	2	90	79
	81	79	3	90	80
	80	79	4	88	80
	81	79	5	86	79
	80	78	6	84	..
	82	78	7	82	79
	84	79	8	82	80
	86	79	9	80	79
	87	79	10	80	79
	87	80	11	80	79
	88	80	12	80	79

4 a. m.—Latitude 3° 02' S.; longitude 21° 44' W.

12 m.—Latitude 2 52 S.; longitude 21 00 W.

8 p. m.—Latitude 2 44 S.; longitude 20 44 W.

JANUARY 31.

	°	°	P. M.	°	°
	80	79	1	87	80
	80	79	2	88	80
	80	79	3	87	80
	80	79	4	84	80
	80	79	5	86	80
	..	..	6	84	80
	82	79	7	84	79
	82	79	8	82	79
	82	79	9	81	79
	84	79	10	81	79
	86	79	11	81	79
	87	79	12	80	79

4 a. m.—Latitude 2° 28' S.; longitude 20° 49' W.

12 m.—Latitude 2 24 S.; longitude 20 46 W.

8 p. m.—Latitude 2 18 S.; longitude 20 38 W.

FEBRUARY 1.

	°	°	P. M.	°	°
	80	79	1	90	80
	80	79	2	90	80
	80	79	3	89	80
	78	79	4	87	80
	79	79	5	85	79
	80	79	6	84	79
	80	79	7	83	79
	83	79	8	82	79
	85	80	9	82	79
	87	80	10	82	79
	88	80	11	82	79
	88	80	12	82	79

4 a. m.—Latitude 2° 07' S.; longitude 20° 39' W.

12 m.—Latitude 2 00 S.; longitude 20 32 W.

8 p. m.—Latitude 1 41 S.; longitude 20 00 W.

Temperature of the air and the surface water—Continued.

FEBRUARY 2.

Hour.	Air.	Water surface.	Hour.	Air.	Water surface.
A. M.	°	°	P. M.	°	°
1	80	79	1	83	79
2	80	79	2	83	79
3	80	79	3	84	79
4	80	79	4	84	79
5	80	79	5	83	78
6	80	79	6	83	78
7	82	79	7	81	77
8	83	79	8	81	77
9	84	79	9	81	78
10	87	79	10	80	78
11	87	79	11	80	78
12	87	79	12	80	78

4 a. m.—Latitude 10° 21' S.; longitude 19° 54' W.

12 m.—Latitude 1° 07' S.; longitude 19° 28' W.

8 p. m.—Latitude 0° 56' S.; longitude 19° 10' W.

FEBRUARY 3.

A. M.	°	°	P. M.	°	°
1	80	78	1	87	79
2	80	77	2	87	79
3	80	77	3	87	79
4	80	77	4	86	79
5	80	77	5	85	79
6	86	78	6	85	79
7	81	78	7	82	79
8	81	78	8	82	79
9	84	79	9	82	79
10	86	79	10	82	79
11	87	79	11	82	79
12	87	79	12	82	79

4 a. m.—Latitude 0° 00' ; longitude 18° 59' W.

12 m.—Latitude 0° 18' N.; longitude 18° 41' W.

8 p. m.—Latitude 0° 19' N.; longitude 18° 42' W.

FEBRUARY 4.

A. M.	°	°	P. M.	°	°
1	81	79	1	85	80
2	81	79	2	86	80
3	81	79	3	86	80
4	81	79	4	86	79
5	80	79	5	86	79
6	80	79	6	83	80
7	83	79	7	80	79
8	85	79	8	80	79
9	86	79	9	80	79
10	86	79	10	80	79
11	88	79	11	80	79
12	86	79	12	80	79

4 a. m.—Latitude 0° 37' N.; longitude 18° 38' W.

12 m.—Latitude 0° 23' N.; longitude 18° 44' W.

8 p. m.—Latitude 0° 13' N.; longitude 18° 48' W.

Temperature of the air and the surface water—Continued.

FEBRUARY 5.

Hour.	Air.	Water surface.	Hour.	Air.	Water surface.
A. M.	°	°	P. M.	°	°
1	80	79	1	86	80
2	80	79	2	86	80
3	80	79	3	87	80
4	80	79	4	87	79
5	80	79	5	85	79
6	80	79	6	84	79
7	81	79	7	83	79
8	82	78	8	82	79
9	84	79	9	82	79
10	85	79	10	82	79
11	86	79	11	82	79
12	86	79	12	82	79

4 a. m.—Latitude 0° 30' N. ; longitude 18° 45' W.

12 m.—Latitude 0 46 N. ; longitude 18 32 W.

8 p. m.—Latitude 0 52 N. ; longitude 18 27 W.

FEBRUARY 6.

A. M.	°	°	P. M.	°	°
1	81	79	1	86	80
2	81	79	2	86	80
3	80	79	3	86	81
4	80	79	4	85	80
5	79	79	5	84	80
6	79	79	6	83	80
7	80	79	7	82	80
8	80	79	8	82	80
9	82	79	9	82	80
10	84	79	10	82	80
11	85	79	11	82	80
12	86	79	12	82	80

4 a. m.—Latitude 0° 55' N. ; longitude 18° 17' W.

12 m.—Latitude 1 00 N. ; longitude 18 04 W.

8 p. m.—Latitude 1 10 N. ; longitude 17 33 W.

FEBRUARY 7.

A. M.	°	°	P. M.	°	°
1	82	80	1	88	81
2	82	79	2	88	81
3	82	79	3	88	81
4	82	79	4	86	81
5	82	79	5	86	80
6	82	80	6	85	80
7	82	80	7	84	80
8	84	80	8	83	80
9	84	80	9	82	80
10	87	80	10	81	80
11	88	80	11	79	80
12	89	80	12	81	80

4 a. m.—Latitude 1° 35' N. ; longitude 17° 05' W.

12 m.—Latitude 1 58 N. ; longitude 16 36 W.

8 p. m.—Latitude 2 09 N. ; longitude 16 19 W.

Temperature of the air and the surface water—Continued.

FEBRUARY 8.

Hour.	Air.	Water surface.	Hour.	Air.	Water surface.
A. M.	°	°	P. M.	°	°
1	82	80	1	86	82
2	82	80	2	90	82
3	82	80	3	91	82
4	82	80	4	90	82
5	81	79	5	89	82
6	81	80	6	87	81
7	84	80	7	84	81
8	85	79	8	84	81
9	85	79	9	82	81
10	86	80	10	82	81
11	86	81	11	82	81
12	87	81	12	82	81

4 a. m.—Latitude 2° 11' N. ; longitude 16° 12' W.

12 m.—Latitude 2 07 N. ; longitude 16 13 W.

8 p. m.—Latitude 2 08 N. ; longitude 16 05 W.

FEBRUARY 9.

P. M.	°	°	A. M.	°	°
1	82	81	1	92	81
2	82	80	2	93	81
3	82	80	3	94	82
4	82	79	4	93	82
5	82	80	5	91	85
6	82	80	6	90	83
7	83	80	7	87	83
8	85	80	8	86	82
9	88	80	9	84	81
10	92	81	10	84	81
11	90	80	11	83	81
12	90	80	12	84	81

4 a. m.—Latitude 2° 15' N. ; longitude 15° 45' W.

12 m.—Latitude 2 18 N. ; longitude 15 44 W.

8 p. m.—Latitude 2 16 N. ; longitude 15 42 W.

FEBRUARY 10.

A. M.	°	°	P. M.	°	°
1	84	81	1	90	83
2	84	81	2	90	83
3	84	81	3	90	83
4	84	81	4	90	82
5	83	81	5	88	81
6	83	81	6	86	81
7	84	81	7	85	81
8	84	81	8	85	81
9	86	81	9	83	80
10	87	81	10	82	80
11	88	81	11	82	80
12	89	81	12	81	80

4 a. m.—Latitude 2° 16' N. ; longitude 15° 33' W.

12 m.—Latitude 2 07 N. ; longitude 15 17 W.

8 p. m.—Latitude 1 59 N. ; longitude 14 45 W.

Temperature of the air and the surface water—Continued.

FEBRUARY 11.

Air.	Water surface.	Hour.	Air.	Water surface.
○	○	P. M.	○	○
82	79	1	82	82
82	79	2	82	82
82	79	3	82	82
82	79	4	86	81
82	80	5	86	81
83	80	6	86	81
84	80	7	84	81
85	81	8	84	81
85	80	9	82	81
85	81	10	82	81
87	82	11	82	81
88	82	12	82	81

4 a. m.—Latitude 1° 59' N.; longitude 14° 50' W.

12 m.—Latitude 1° 48' N.; longitude 15° 01' W.

8 p. m.—Latitude 1° 41' N.; longitude 15° 23' W.

FEBRUARY 12.

○	○	P. M.	○	○
82	80	1	87	81
82	80	2	86	81
82	80	3	86	81
82	80	4	86	81
82	80	5	84	80
82	81	6	84	80
83	81	7	83	81
86	81	8	83	80
88	81	9	82	79
88	81	10	82	79
88	81	11	82	79
88	81	12	82	79

4 a. m.—Latitude 1° 28' N.; longitude 15° 58' W.

12 m.—Latitude 0° 55' N.; longitude 16° 22' W.

8 p. m.—Latitude 0° 15' N.; longitude 16° 41' W.

FEBRUARY 13.

○	○	P. M.	○	○
82	79	1	83	79
82	79	2	84	79
82	79	3	85	79
82	79	4	84	79
82	81	5	84	79
82	80	6	84	79
82	79	7	83	79
85	80	8	82	79
86	79	9	78	79
88	79	10	78	79
88	80	11	79	78
88	79	12	80	79

4 a. m.—Latitude 0° 17' S.; longitude 16° 59' W.

12 m.—Latitude 0° 26' S.; longitude 17° 30' W.

8 p. m.—Latitude 0° 33' S.; longitude 17° 50' W.

Temperature of the air and the surface water—Continued.

FEBRUARY 14.

Hour.	Air.	Water surface.	Hour.	Air.	Water surface.
A. M.	°	°	P. M.	°	°
1	80	80	1	87	80
2	80	80	2	87	80
3	80	80	3	87	80
4	79	80	4	80	79
5	80	79	5	79	78
6	80	78	6	80	79
7	..	..	7	78	79
8	84	79	8	78	78
9	83	79	9	78	79
10	85	79	10	78	79
11	87	80	11	78	79
12	87	80	12	78	79

4 a. m.—Latitude 0° 46' S. ; longitude 18° 36' W.

12 m.—Latitude 0 33 S. ; longitude 19 02 W.

8 p. m.—Latitude 0 22 S. ; longitude 19 07 W.

FEBRUARY 15.

A. M.	°	°	P. M.	°	°
1	76	79	1	85	80
2	76	79	2	85	80
3	76	79	3	84	80
4	76	79	4	87	80
5	76	78	5	87	80
6	76	78	6	86	79
7	78	78	7	83	79
8	77	80	8	81	79
9	77	79	9	80	79
10	79	79	10	80	79
11	79	79	11	80	79
12	82	79	12	80	79

4 a. m.—Latitude 0° 38' S. ; longitude 18° 57' W.

12 m.—Latitude 0 38 S. ; longitude 18 59 W.

8 p. m.—Latitude 0 26 S. ; longitude 19 13 W.

FEBRUARY 16.

A. M.	°	°	P. M.	°	°
1	80	79	1	87	80
2	80	79	2	87	80
3	80	79	3	86	80
4	80	79	4	86	80
5	80	79	5	86	80
6	80	79	6	83	79
7	82	79	7	82	79
8	83	78	8	82	79
9	84	78	9	82	78
10	86	78	10	82	79
11	87	79	11	82	79
12	86	79	12	82	79

4 a. m.—Latitude 0° 30' S. ; longitude 20° 09' W.

12 m.—Latitude 0 27 S. ; longitude 20 51 W.

8 p. m.—Latitude 0 24 S. ; longitude 21 18 W.

Temperature of the air and the surface water—Continued.

FEBRUARY 17.

Hour.	Air.	Water surface.	Hour.	Air.	Water surface.
A. M.	°	°	P. M.	°	°
1	82	79	1	85	79
2	82	79	2	85	79
3	81	79	3	85	79
4	80	79	4	85	79
5	80	79	5	85	79
6	80	78	6	84	79
7	80	78	7	82	79
8	82	78	8	82	79
9	84	79	9	82	79
10	85	79	10	82	79
11	85	79	11	82	79
12	84	78	12	82	79

4 a. m.—Latitude 0° 19' S. ; longitude 22° 06' W.

12 m.—Latitude 0 25 S. ; longitude 22 27 W.

8 p. m.—Latitude 0 50 S. ; longitude 22 52 W.

FEBRUARY 18.

Hour.	°	°	P. M.	°	°
1	81	78	1	91	80
2	81	78	2	92	81
3	81	78	3	92	80
4	81	78	4	90	79
5	81	78	5	90	79
6	81	79	6	88	79
7	82	78	7	84	79
8	84	78	8	82	79
9	86	78	9	82	79
10	..	..	10	82	79
11	..	..	11	82	79
12	90	79	12	81	79

4 a. m.—Latitude 0° 52' S. ; longitude 23° 00' W.

12 m.—Latitude 1 01 S. ; longitude 23 18 W.

8 p. m.—Latitude 0 57 S. ; longitude 23 27 W.

FEBRUARY 19.

A. M.	°	°	P. M.	°	°
1	81	78	1	85	79
2	81	79	2	84	79
3	80	79	3	85	79
4	81	79	4	86	79
5	81	79	5	86	79
6	81	79	6	85	79
7	83	79	7	..	..
8	84	79	8	82	79
9	86	79	9	82	79
10	86	79	10	82	79
11	86	79	11	82	79
12	86	79	12	81	79

4 a. m.—Latitude 1° 14' S. ; longitude 24° 09' W.

12 m.—Latitude 1 42 S. ; longitude 24 39 W.

8 p. m.—Latitude 1 49 S. ; longitude 24 53 W.

Temperature of the air and the surface water—Continued.

FEBRUARY 20.

Hour.	Air.	Water surface.	Hour.	Air.	Water surface.
A. M.	°	°	P. M.	°	°
1	80	79	1	85	80
2	80	79	2	85	80
3	80	79	3	85	80
4	80	79	4	85	80
5	80	79	5	85	79
6	80	79	6	84	79
7	82	79	7	82	79
8	85	79	8	82	79
9	86	79	9	82	79
10	87	79	10	82	79
11	86	79	11	81	79
12	86	80	12	81	79

4 a. m.—Latitude 2° 09' S.; longitude 25° 58' W.

12 m.—Latitude 2° 37' S.; longitude 26° 48' W.

8 p. m.—Latitude 2° 51' S.; longitude 27° 34' W.

FEBRUARY 21.

A. M.	°	°	P. M.	°	°
1	80	79	1	90	79
2	80	79	2	90	79
3	80	79	3	88	80
4	80	79	4	85	80
5	81	79	5	90	80
6	80	79	6	85	81
7	80	79	7	83	80
8	84	79	8	82	80
9	85	79	9	81	79
10	88	79	10	81	79
11	89	79	11	81	79
12	90	79	12	80	79

4 a. m.—Latitude 3° 06' S.; longitude 28° 37' W.

12 m.—Latitude 3° 14' S.; longitude 29° 09' W.

8 p. m.—Latitude 3° 43' S.; longitude 29° 44' W.

FEBRUARY 22.

A. M.	°	°	P. M.	°	°
1	81	79	1	85	80
2	81	79	2	85	80
3	80	79	3	86	80
4	80	79	4	84	80
5	81	79	5	83	80
6	82	79	6	83	80
7	83	79	7	82	79
8	82	80	8	82	79
9	84	79	9	82	79
10	85	80	10	82	79
11	86	80	11	82	79
12	86	80	12	82	79

4 a. m.—Latitude 3° 33' S.; longitude 30° 36' W.

12 m.—Latitude 3° 45' S.; longitude 31° 28' W.

8 p. m.—Latitude 3° 50' S.; longitude 31° 44' W.

Temperature of the air and the surface water—Continued.

FEBRUARY 23.

Hour.	Air.	Water surface.	Hour.	Air.	Water surface.
A. M.	°	°	P. M.	°	°
1	78	79	1	84	81
2	78	79	2	86	81
3	78	79	3	86	81
4	78	79	4	85	80
5	78	79	5	85	79
6	78	79	6	85	79
7	79	79	7	82	79
8	80	79	8	82	..
9	80	79	9	81	..
10	80	79	10	81	..
11	82	79	11	81	..
12	82	79	12	81	..

4 a. m.—Latitude 3° 32' S. ; longitude 31° 43' W.

12 m.—Latitude 3 35 S. ; longitude 31 45 W.

8 p. m.—Latitude 3 48 S. ; longitude 32 07 W.

FEBRUARY 24.

A. M.	°	°	P. M.	°	°
1	80	79	1	88	..
2	80	79	2	88	..
3	80	79	3	88	..
4	80	79	4	88	..
5	81	79	5	87	..
6	83	79	6	87	..
7	83	79	7	87	..
8	84	79	8	86	..
9	86	79	9	84	..
10	86	79	10	82	..
11	86	80	11	82	..
12	86	80	12	82	..

4 a. m.—Fernando de Noronha.

12 m.—Fernando de Noronha.

8 p. m.—Fernando de Noronha.

FEBRUARY 25.

A. M.	°	°	P. M.	°	°
1	82	79	1	88	..
2	82	79	2	88	..
3	80	79	3	88	81
4	80	79	4	87	81
5	82	..	5	86	81
6	82	79	6	85	81
7	83	..	7	82	81
8	84	79	8	82	81
9	86	..	9	82	..
10	88	80	10	82	79
11	88	..	11	82	..
12	88	81	12	82	..

4 a. m.—Fernando de Noronha.

12 m.—Fernando de Noronha.

8 p. m.—Fernando de Noronha.

Temperature of the air and the surface water—Continued.

FEBRUARY 26.

Hour.	Air.	Water surface.	Hour.	Air.	Water surface.
A. M.	°	°	P. M.	°	°
1	82	80	1	82	80
2	81	79	2	82	80
3	80	79	3	78	..
4	80	79	4	78	..
5	80	80	5	77	..
6	82	80	6	76	79
7	85	80	7	78	..
8	87	80	8	77	79
9	89	..	9	77	79
10	90	81	10	78	80
11	89	81	11	78	80
12	89	81	12	78	80

4 a. m.—Fernando de Noronha.

12 m.—Fernando de Noronha.

8 p. m.—Fernando de Noronha.

FEBRUARY 27.

A. M.	°	°	P. M.	°	°
1	78	..	1	85	81
2	78	79	2	87	81
3	78	..	3	87	81
4	78	79	4	86	79
5	80	..	5	85	79
6	..	..	6	85	80
7	..	..	7	83	80
8	..	..	8	83	80
9	85	80	9	80	81
10	86	80	10	79	79
11	87	80	11	79	79
12	88	80	12	79	79

4 a. m.—Fernando de Noronha.

12 m.—Off Fernando de Noronha.

8 p. m.—Latitude 3° 59' S. ; longitude 32° 33' W.

FEBRUARY 28.

A. M.	°	°	P. M.	°	°
1	78	79	1	78	79
2	78	79	2	80	79
3	78	79	3	80	79
4	77	79	4	80	79
5	77	79	5	80	79
6	77	79	6	80	79
7	78	79	7	82	79
8	78	80	8	82	79
9	78	79	9	80	79
10	79	79	10	80	79
11	78	79	11	80	79
12	78	79	12	81	79

4 a. m.—Latitude 4° 15' S. ; longitude 32° 45' W.

12 m.—Latitude 4 30 S. ; longitude 32 37 W.

8 p. m.—Latitude 4 42 S. ; longitude 32 46 W.

Temperature of the air and the surface water—Continued.

FEBRUARY 29.

Hour.	Air.	Water surface.	Hour.	Air.	Water surface.
A. M.	°	°	P. M.	°	°
1	81	79	1	84	80
2	81	79	2	84	80
3	81	79	3	84	80
4	81	79	4	85	80
5	82	79	5	85	80
6	82	79	6	84	80
7	82	79	7	83	80
8	82	79	8	82	80
9	83	79	9	82	81
10	86	80	10	82	80
11	84	80	11	82	80
12	84	80	12	82	80

4 a. m.—Latitude 5° 24' S.; longitude 32° 42' W.

12 m.—Latitude 5 55 S.; longitude 32 56 W.

8 p. m.—Latitude 6 44 S.; longitude 33 15 W.

MARCH 1.

A. M.	°	°	P. M.	°	°
1	82	80	1	84	81
2	82	80	2	85	81
3	82	80	3	84	81
4	82	80	4	88	81
5	82	80	5	86	81
6	83	80	6	84	81
7	83	80	7	83	81
8	84	79	8	83	81
9	86	80	9	83	81
10	89	80	10	83	81
11	88	80	11	82	81
12	87	80	12	82	81

4 a. m.—Latitude 7° 26' S.; longitude 33° 50' W.

12 m.—Latitude 7 49 S.; longitude 34 10 W.

8 p. m.—Latitude 8 17 S.; longitude 34 31 W.

MARCH 2.

A. M.	°	°	P. M.	°	°
1	82	80	1	90	84
2	82	80	2	91	84
3	82	81	3	90	84
4	82	80	4	89	84
5	82	80	5	87	85
6	83	80	6	86	85
7	84	80	7	86	86
8	84	80	8	84	83
9	86	81	9	84	81
10	88	81	10	84	81
11	92	81	11	84	81
12	90	81	12	84	81

4 a. m.—Pernambuco.

12 m.—Pernambuco.

8 p. m.—Pernambuco.

Temperature of the air and the surface water—Continued.

MARCH 3.

Hour.	Air.	Water surface.	Hour.	Air.	
A. M.	°	°	P. M.	°	
1	83	..	1	86	
2	83	81	2	88	
3	83	81	3	88	
4	83	81	4	88	
5	82	..	5	85	
6	80	83	6	84	
7	80	..	7	84	
8	80	81	8	84	
9	86	..	9	84	
10	86	77	10	84	
11	86	..	11	84	
12	86	78	12	83	

4 a. m.—Pernambuco.

12 m.—Pernambuco.

8 p. m.—Pernambuco.

MARCH 4.

A. M.	°	°	P. M.	°	
1	82	81	1	..	
2	82	..	2	..	
3	81	81	3	..	
4	80	..	4	..	
5	82	..	5	..	
6	81	82	6	..	
7	81	..	7	86	
8	81	81	8	86	
9	82	81	9	86	
10	84	81	10	86	
11	84	81	11	85	
12	86	81	12	84	

4 a. m.—Pernambuco.

12 m.—Pernambuco.

8 p. m.—Pernambuco.

MARCH 5.

A. M.	°	°	P. M.	°	
1	83	82	1	89	
2	82	81	2	91	
3	82	..	3	92	
4	82	..	4	91	
5	82	82	5	89	
6	82	82	6	91	
7	83	82	7	89	
8	84	82	8	89	
9	86	82	9	83	
10	86	82	10	83	
11	86	81	11	82	
12	86	81	12	82	

4 a. m.—Pernambuco.

12 m.—Pernambuco.

8 p. m.—Pernambuco.

Temperature of the air and the surface water—Continued.

MARCH 6.

W.	Air.	Water surface.	Hour.	Air.	Water surface.
I.	°	°	P. M.	°	°
	82	..	1	90	..
	82	82	2	90	83
	82	..	3	91	..
	82	81	4	90	83
	80	81	5	90	..
	80	81	6	88	83
	82	81	7	85	..
	84	81	8	84	..
	83	..	9	84	..
	84	82	10	84	83
	84	..	11	84	..
	88	82	12	84	83

4 a. m.—Pernambuco.
12 m.—Pernambuco.
8 p. m.—Pernambuco.

MARCH 7.

°	°	P. M.	°	°
81	81	1	90	81
81	81	2	90	81
81	81	3	90	81
81	81	4	..	..
79	..	5	86	82
82	81	6	86	82
83	..	7	84	81
84	81	8	83	81
85	..	9	84	81
85	81	10	84	81
86	..	11	83	81
88	82	12	83	81

4 a. m.—Pernambuco.
12 m.—Pernambuco.
8 p. m.—Latitude 8° 06' S. ; longitude 34° 50' W.

MARCH 8.

°	°	P. M.	°	°
82	81	1	86	80
82	81	2	87	80
82	81	3	90	81
82	80	4	88	81
82	80	5	85	80
83	80	6	84	80
85	80	7	84	81
86	80	8	80	81
89	80	9	82	80
89	81	10	82	80
88	81	11	83	80
88	81	12	82	80

4 a. m.—Latitude 7° 42' S. ; longitude 34° 37' W.
12 m.—Latitude 7 14 S. ; longitude 34 17 W.
8 p. m.—Latitude 6 51 S. ; longitude 33 34 W.

Temperature of the air and the surface water—Continued.

MARCH 9.

Hour.	Air.	Water surface.	Hour.	Air.	Water surface.
A. M.	o	o	P. M.	o	o
1	82	80	1	88	81
2	82	80	2	88	81
3	82	80	3	88	81
4	82	82	4	87	81
5	82	81	5	86	81
6	82	81	6	85	80
7	82	81	7	84	80
8	83	80	8	82	80
9	86	81	9	83	80
10	87	80	10	82	80
11	88	80	11	82	80
12	90	80	12	82	80

4 a. m.—Latitude 6° 19' S. ; longitude 33° 30' W.
12 m.—Latitude 6 07 S. ; longitude 33 17 W.
8 p. m.—Latitude 5 31 S. ; longitude 32 49 W.

MARCH 10.

A. M.	o	o	P. M.	o	o
1	82	80	1	87	81
2	82	80	2	86	81
3	82	80	3	86	81
4	82	79	4	87	81
5	82	80	5	87	81
6	82	80	6	86	81
7	84	80	7	84	80
8	86	81	8	84	80
9	86	81	9	84	80
10	87	81	10	84	80
11	87	80	11	84	80
12	88	81	12	84	80

4 a. m.—Latitude 4° 56' S. ; longitude 32° 31' W.
12 m.—Latitude 4 35 S. ; longitude 32 23 W.
8 p. m.—Latitude 4 43 S. ; longitude 32 54 W.

MARCH 11.

A. M.	o	o	P. M.	o	o
1	82	79	1	88	81
2	82	79	2	90	81
3	82	79	3	..	..
4	82	80	4	..	..
5	83	80	5	..	..
6	82	80	6	..	..
7	83	80	7	84	..
8	84	80	8	84	81
9	86	80	9	83	..
10	87	80	10	82	81
11	88	80	11	82	..
12	88	80	12	82	79

4 a. m.—Latitude 4° 15' S. ; longitude 32° 45' W.
12 m.—Latitude 3 57 S. ; longitude 32 19 W.
8 p. m.—Fernando de Noronha.

Temperature of the air and the surface water—Continued.

MARCH 12.

Hour.	Air.	Water surface.	Hour.	Air.	Water surface.
A. M.	°	°	P. M.	°	°
1	82	..	1	89	80
2	82	79	2	90	81
3	82	..	3	90	..
4	82	79	4	89	81
5	82	..	5	86	..
6	84	80	6	85	81
7	84	..	7	85	..
8	84	80	8	86	82
9	84	..	9	84	..
10	86	80	10	83	80
11	86	..	11	83	..
12	88	80	12	83	81

4 a. m.—Fernando de Noronha.

12 m.—Fernando de Noronha.

8 p. m.—Fernando de Noronha.

MARCH 13.

A. M.	°	°	P. M.	°	°
1	83	..	1	..	..
2	83	80	2	..	..
3	83	..	3	..	..
4	82	80	4	86	81
5	81	..	5	86	81
6	83	..	6	84	80
7	83	80	7	84	81
8	83	80	8	84	81
9	86	80	9	84	81
10	86	80	10	84	80
11	88	80	11	84	80
12	87	80	12	84	80

4 a. m.—Fernando de Noronha.

12 m.—Latitude 3° 52' S. ; longitude 33° 02' W.

8 p. m.—Latitude 3 43 S. ; longitude 33 16 W.

MARCH 14.

A. M.	°	°	P. M.	°	°
1	82	81	1	84	81
2	82	80	2	85	80
3	82	80	3	85	81
4	82	80	4	..	..
5	82	80	5	..	..
6	84	80	6	..	..
7	84	80	7	85	81
8	84	80	8	84	81
9	84	80	9	84	81
10	84	80	10	82	81
11	85	80	11	82	80
12	86	80	12	82	81

4 a. m.—Latitude 3° 17' S. ; longitude 33° 16' W.

12 m.—Latitude 3 36 S. ; longitude 33 27 W.

8 p. m.—Rocas.

Temperature of the air and the surface water—Continued.

MARCH 15.

Hour.	Air.	Water surface.	Hour.	Air.
A. M.	°	°	P. M.	°
1	82	80	1	87
2	82	80	2	87
3	82	81	3	88
4	82	80	4	88
5	83	..	5	86
6	84	80	6	85
7	84	..	7	85
8	84	81	8	84
9	85	80	9	84
10	85	79	10	83
11	86	..	11	83
12	86	..	12	83

4 a. m.—Rocas.

12 m.—Rocas.

8 p. m.—Rocas.

MARCH 16.

A. M.	°	°	P. M.	°
1	83	..	1	85
2	83	80	2	85
3	83	..	3	88
4	82	80	4	88
5	79	..	5	86
6	81	80	6	85
7	80	..	7	84
8	81	81	8	84
9	82	..	9	84
10	84	81	10	84
11	85	..	11	84
12	86	81	12	84

4 a. m.—Rocas.

12 m.—Rocas.

8 p. m.—Rocas.

MARCH 17.

A. M.	°	°	P. M.	°
1	84	..	1	81
2	84	81	2	81
3	84	..	3	82
4	82	81	4	82
5	80	80	5	82
6	..	..	6	82
7	..	..	7	82
8	..	..	8	82
9	83	..	9	82
10	84	80	10	82
11	82	80	11	82
12	82	80	12	82

4 a. m.—Rocas.

12 m.—Latitude 30° 53' S.; longitude 33° 52' W.

8 p. m.—Latitude 30° 40' S.; longitude 33° 41' W.

Temperature of the air and the surface water—Continued.

MARCH 18.

Hour.	Air.	Water surface.	Hour.	Air.	Water surface.
A. M.	°	°	P. M.	°	°
1	82	80	1	85	80
2	82	80	2	85	80
3	82	80	3	85	80
4	82	80	4	86	80
5	82	80	5	86	80
6	82	80	6	84	80
7	82	80	7	84	81
8	83	80	8	84	80
9	84	80	9	84	80
10	86	81	10	82	81
11	88	80	11	82	81
12	86	81	12	82	80

4 a. m.—Latitude 3° 26' S. ; longitude 33° 55' W.

12 m.—Latitude 3 51 S. ; longitude 33 56 W.

8 p. m.—Latitude 3 30 S. ; longitude 33 40 W.

MARCH 19.

A. M.	°	°	P. M.	°	°
1	82	80	1	89	81
2	82	80	2	91	81
3	82	80	3	90	81
4	82	80	4	88	81
5	82	80	5	86	81
6	82	80	6	84	81
7	84	80	7	84	81
8	85	80	8	82	81
9	85	80	9	82	81
10	85	80	10	82	81
11	87	80	11	82	81
12	87	80	12	82	81

4 a. m.—Latitude 3° 24' S. ; longitude 33° 51' W.

12 m.—Latitude 3 34 S. ; longitude 33 49 W.

8 p. m.—Latitude 3 02 S. ; longitude 33 30 W.

MARCH 20.

A. M.	°	°	P. M.	°	°
1	80	80	1	78	80
2	80	80	2	78	80
3	80	80	3	79	80
4	80	80	4	80	80
5	78	80	5	80	80
6	78	80	6	80	80
7	78	80	7	80	80
8	78	80	8	80	80
9	76	80	9	80	80
10	78	80	10	80	80
11	78	80	11	80	80
12	78	80	12	80	80

4 a. m.—Latitude 3° 04' S. ; longitude 33° 23' W.

12 m.—Latitude 2 46 S. ; longitude 33 22 W.

8 p. m.—Latitude 2 48 S. ; longitude 33 29 W.

Temperature of the air and the surface water—Continued.

MARCH 21.

Hour.	Air.	Water surface.	Hour.	Air.	Water surface.
A. M.	°	°	P. M.	°	°
1	80	80	1	85	81
2	80	80	2	85	81
3	80	80	3	85	81
4	80	80	4	85	81
5	80	80	5	85	81
6	82	80	6	85	81
7	82	80	7	84	80
8	84	81	8	82	80
9	84	80	9	83	80
10	84	80	10	82	81
11	84	80	11	82	81
12	84	80	12	82	81

4 a. m.—Latitude 2° 46' S.; longitude 33° 05' W.

12 m.—Latitude 3 29 S.; longitude 33 18 W.

8 p. m.—Latitude 3 46 S.; longitude 33 32 W.

MARCH 22.

A. M.	°	°	P. M.	°	°
1	82	81	1	90	81
2	82	81	2	90	81
3	82	81	3	89	81
4	82	81	4	88	81
5	82	80	5	84	81
6	82	80	6	84	81
7	85	80	7	83	81
8	84	80	8	83	81
9	88	80	9	83	81
10	88	81	10	83	81
11	88	81	11	83	81
12	88	81	12	82	81

4 a. m.—Latitude 3° 54' S.; longitude 33° 29' W.

12 m.—Latitude 3 35 S.; longitude 33 35 W.

8 p. m.—Latitude 3 31 S.; longitude 33 36 W.

MARCH 23.

A. M.	°	°	P. M.	°	°
1	82	81	1	87	83
2	82	80	2	88	83
3	82	80	3	88	82
4	82	80	4	86	82
5	82	81	5	84	81
6	82	81	6	84	81
7	82	81	7	82	81
8	82	81	8	82	81
9	86	81	9	82	81
10	88	81	10	82	81
11	88	81	11	82	81
12	88	81	12	82	81

4 a. m.—Latitude 3° 28' S.; longitude 33° 46' W.

12 m.—Latitude 3 30 S.; longitude 33 49 W.

8 p. m.—Latitude 3 39 S.; longitude 33 42 W.

Temperature of the air and the surface water—Continued.

MARCH 24.

Hour.	Air.	Water surface.	Hour.	Air.	Water surface.
A. M.	°	°	P. M.	°	°
1	82	81	1	84	81
2	82	81	2	84	81
3	82	81	3	82	81
4	82	81	4	80	80
5	82	81	5	80	80
6	82	81	6	79	80
7	82	81	7	78	80
8	82	81	8	77	79
9	82	81	9	77	80
10	82	81	10	77	80
11	82	81	11	77	81
12	83	80	12	77	81

4 a. m.—Latitude 3° 33' S.; longitude 33° 44' W.

12 m.—Latitude 3 46 S.; longitude 33 42 W.

8 p. m.—Latitude 3 57 S.; longitude 33 27 W.

MARCH 25.

A. M.	°	°	P. M.	°	°
1	..	..	1	88	82
2	74	79	2	89	82
3	74	80	3	89	82
4	74	80	4	87	83
5	76	80	5	87	83
6	78	80	6	86	81
7	77	80	7	83	81
8	82	80	8	83	81
9	84	80	9	82	81
10	86	80	10	82	81
11	90	80	11	82	82
12	90	80	12	82	82

4 a. m.—Latitude 3° 54' S.; longitude 33° 31' W.

12 m.—Latitude 4. 00 S.; longitude 33 41 W.

8 p. m.—Latitude 4 03 S.; longitude 33 46 W.

MARCH 26.

A. M.	°	°	P. M.	°	°
1	82	81	1	..	81
2	82	82	2	..	81
3	82	81	3	..	81
4	82	81	4	..	81
5	83	81	5	..	81
6	83	81	6	..	81
7	85	81	7	..	81
8	..	81	8	..	81
9	90	82	9	..	82
10	92	82	10	..	81
11	89	82	11	..	81
12	89	82	12	..	81

4 a. m.—Latitude 4° 10' S.; longitude 34° 05' W.

12 m.—Latitude 3 59 S.; longitude 33 58 W.

8 p. m.—Latitude 3 47 S.; longitude 33 55 W.

Temperature of the air and the surface water—Continued

MARCH 27.

Hour.	Air.	Water surface.	Hour.	Air.	Water surface.
A. M.	°	°	P. M.	°	°
1	80	81	1	83	81
2	80	81	2	82	81
3	80	81	3	82	81
4	80	81	4	83	82
5	79	81	5	83	82
6	80	81	6	83	81
7	82	81	7	83	82
8	85	..	8	83	82
9	86	81	9	82	81
10	85	82	10	82	81
11	85	82	11	82	81
12	83	82	12	82	81

4 a. m.—Latitude 3° 51' S.; longitude 33° 53' W.

12 m.—Latitude 3 49 S.; longitude 33 59 W.

8 p. m.—Latitude 4 00 S.; longitude 34 17 W.

MARCH 28.

A. M.	°	°	P. M.	°	°
1	83	81	1	88	82
2	83	81	2	87	82
3	83	81	3	88	82
4	83	81	4	90	83
5	82	82	5	88	83
6	84	82	6	88	83
7	85	82	7	86	82
8	86	82	8	84	82
9	87	81	9	83	82
10	87	82	10	83	82
11	85	82	11	83	82
12	85	82	12	83	82

4 a. m.—Latitude 4° 19' S.; longitude 34° 23' W.

12 m.—Latitude 4 13 S.; longitude 34 38 W.

8 p. m.—Latitude 4 21 S.; longitude 34 52 W.

MARCH 29.

A. M.	°	°	P. M.	°	°
1	82	82	1	84	83
2	82	81	2	86	83
3	82	82	3	85	83
4	82	82	4	85	82
5	82	82	5	85	82
6	83	83	6	85	82
7	83	82	7	82	82
8	86	81	8	80	81
9	85	82	9	80	81
10	85	82	10	80	81
11	86	82	11	79	81
12	87	82	12	78	81

4 a. m.—Latitude 4° 22' S.; longitude 34° 58' W.

12 m.—Latitude 4 30 S.; longitude 35 03 W.

8 p. m.—Latitude 4 28 S.; longitude 35 06 W.

Temperature of the air and the surface water—Continued.

MARCH 30.

Hour.	Air.	Water surface.	Hour.	Air.	Water surface.
A. M.	°	°	P. M.	°	°
1	78	81	1	86	82
2	79	81	2	86	82
3	79	81	3	86	82
4	79	81	4	88	82
5	79	81	5	85	82
6	80	81	6	85	82
7	82	81	7	83	83
8	84	81	8	82	82
9	86	82	9	82	82
10	86	82	10	82	81
11	87	82	11	82	82
12	88	83	12	82	82

4 a. m.—Latitude 4° 27' S.; longitude 35° 06' W.

12 m.—Latitude 4 22 S.; longitude 35 17 W.

8 p. m.—Latitude 4 22 S.; longitude 35 25 W.

MARCH 31.

A. M.	°	°	P. M.	°	°
1	80	82	1	..	83
2	80	82	2	..	83
3	80	82	3	..	83
4	80	82	4	87	83
5	81	82	5	85	83
6	82	82	6	85	83
7	84	82	7	82	82
8	84	82	8	82	82
9	84	82	9	82	82
10	84	82	10	80	81
11	81	82	11	78	81
12	82	82	12	79	81

4 a. m.—Latitude 4° 24' S.; longitude 35° 22' W.

12 m.—Latitude 4 17 S.; longitude 35 19 W.

8 p. m.—Latitude 4 19 S.; longitude 35 24 W.

APRIL 1.

A. M.	°	°	P. M.	°	°
1	79	81	1	88	82
2	79	81	2	86	82
3	80	81	3	85	83
4	80	81	4	85	82
5	80	81	5	85	82
6	80	81	6	83	82
7	83	82	7	84	82
8	84	82	8	84	82
9	86	82	9	84	82
10	87	82	10	84	81
11	88	82	11	82	82
12	89	82	12	82	82

4 a. m.—Latitude 4° 13' S.; longitude 35° 24' W.

12 m.—Latitude 3 34 S.; longitude 35 38 W.

8 p. m.—Latitude 3 12 S.; longitude 35 57 W.

Temperature of the air and the surface water—Continued.

APRIL 2.

Hour.	Air.	Water surface.	Hour.	Air.	Water surface.
A. M.	°	°	P. M.	°	°
1	82	82	1	88	82
2	82	82	2	88	82
3	82	82	3	86	82
4	82	82	4	85	82
5	82	82	5	83	82
6	84	82	6	83	82
7	83	81	7	82	82
8	84	81	8	82	82
9	84	82	9	82	82
10	86	82	10	82	82
11	88	82	11	82	82
12	89	82	12	82	82

4 a. m.—Latitude 20° 40' S.; longitude 36° 30' W.

12 m.—Latitude 2 27 S.; longitude 36 46 W.

8 p. m.—Latitude 2 27 S.; longitude 36 46 W.

APRIL 3.

A. M.	°	°	P. M.	°	°
1	81	82	1	84	82
2	81	82	2	84	82
3	81	82	3	85	82
4	80	82	4	87	82
5	80	..	5	86	82
6	80	..	6	86	82
7	82	..	7	84	82
8	83	..	8	84	82
9	84	..	9	82	82
10	84	..	10	82	82
11	85	..	11	82	82
12	84	..	12	82	82

4 a. m.—Latitude 20° 21' S.; longitude 36° 36' W.

12 m.—Latitude 2 23 S.; longitude 36 36 W.

8 p. m.—Latitude 2 23 S.; longitude 36 32 W.

APRIL 4.

A. M.	°	°	P. M.	°	°
1	80	80	1	91	83
2	80	80	2	88	84
3	80	80	3	86	85
4	80	80	4	87	83
5	80	81	5	87	83
6	80	81	6	86	83
7	83	81	7	84	83
8	84	81	8	83	83
9	88	82	9	82	82
10	90	82	10	82	82
11	92	82	11	82	81
12	94	82	12	82	81

4 a. m.—Latitude 20° 23' S.; longitude 36° 34' W.

12 m.—Latitude 2 16 S.; longitude 36 38 W.

8 p. m.—Latitude 2 07 S.; longitude 36 49 W.

Temperature of the air and the surface water—Continued.

APRIL 5.

Hour.	Air.	Water surface.	Hour.	Air.	Water surface.
A. M.	°	°	P. M.	°	°
1	82	81	1	87	81
2	82	81	2	86	82
3	82	81	3	86	82
4	82	81	4	86	82
5	82	81	5	85	82
6	83	81	6	85	82
7	84	81	7	86	81
8	86	81	8	84	81
9	86	81	9	83	82
10	87	81	10	83	82
11	88	82	11	82	81
12	88	82	12	82	81

4 a. m.—Latitude 1° 43' S. ; longitude 37° 08' W.

12 m.—Latitude 1 16 S. ; longitude 37 30 W.

8 p. m.—Latitude 1 08 S. ; longitude 37 35 W.

APRIL 6.

A. M.	°	°	P. M.	°	°
1	82	81	1	80	81
2	81	81	2	81	81
3	81	80	3	82	81
4	80	80	4	82	80
5	78	80	5	81	80
6	78	80	6	82	80
7	78	80	7	82	80
8	78	80	8	82	80
9	78	81	9	81	80
10	78	81	10	81	80
11	78	81	11	81	80
12	78	81	12	82	80

4 a. m.—Latitude 0° 36' S. ; longitude 37° 37' W.

12 m.—Latitude 0 16 S. ; longitude 37 52 W.

8 p. m.—Latitude 0 06 S. ; longitude 38 01 W.

APRIL 7.

A. M.	°	°	P. M.	°	°
1	82	80	1	87	79
2	82	79	2	84	79
3	82	80	3	84	79
4	82	80	4	84	79
5	82	80	5	84	79
6	82	80	6	83	79
7	82	81	7	81	79
8	82	80	8	82	79
9	84	80	9	82	79
10	85	80	10	80	79
11	86	80	11	80	79
12	87	80	12	80	79

4 a. m.—Latitude 0° 06' N. ; longitude 38° 36' W.

12 m.—Latitude 0 19 N. ; longitude 38 59 W.

8 p. m.—Latitude 0 44 N. ; longitude 39 42 W.

Temperature of the air and the surface water—Continued.

APRIL 8.

Hour.	Air.	Water surface.	Hour.	Air.	Water surface.
A. M.	°	°	P. M.	°	°
1	80	79	1	91	81
2	80	79	2	90	81
3	80	79	3	90	81
4	80	79	4	84	80
5	80	79	5	84	80
6	80	79	6	83	80
7	80	79	7	82	79
8	83	79	8	82	80
9	85	79	9	81	80
10	84	79	10	81	80
11	86	79	11	81	80
12	92	81	12	81	80

4 a. m.—Latitude 0° 43' N.; longitude 40° 11' W.

12 m.—Latitude 0 48 N.; longitude 40 40 W.

8 p. m.—Latitude 0 59 N.; longitude 40 56 W.

APRIL 9.

A. M.	°	°	P. M.	°	°
1	80	80	1	91	81
2	81	80	2	90	81
3	81	80	3	86	81
4	81	79	4	87	80
5	80	79	5	84	80
6	80	79	6	84	79
7	82	79	7	82	80
8	83	79	8	82	80
9	84	79	9	80	80
10	86	79	10	80	79
11	88	79	11	80	79
12	89	80	12	80	79

4 a. m.—Latitude 0° 50' N.; longitude 40° 47' W.

12 m.—Latitude 1 00 N.; longitude 40 53 W.

8 p. m.—Latitude 0 51 N.; longitude 41 07 W.

APRIL 10.

A. M.	°	°	P. M.	°	°
1	80	79	1	79	79
2	80	79	2	80	80
3	80	79	3	80	79
4	80	79	4	82	79
5	78	80	5	82	80
6	79	80	6	82	80
7	80	80	7	82	80
8	82	80	8	81	80
9	83	80	9	80	80
10	84	80	10	80	80
11	82	80	11	80	79
12	80	80	12	80	79

4 a. m.—Latitude 1° 10' N.; longitude 41° 22' W.

12 m.—Latitude 0 53 N.; longitude 41 04 W.

8 p. m.—Latitude 0 50 N.; longitude 41 03 W.

Temperature of the air and the surface water—Continued.

APRIL 11.

Hour.	Air.	Water surface.	Hour.	Air.	Water surface.
A. M.	°	°	P. M.	°	°
1	80	79	1	86	80
2	80	80	2	86	81
3	80	79	3	87	80
4	80	79	4	88	80
5	80	79	5	84	80
6	80	80	6	83	80
7	81	80	7	84	80
8	82	80	8	82	80
9	83	79	9	82	80
10	84	80	10	82	80
11	84	80	11	82	80
12	85	80	12	82	80

4 a. m.—Latitude 1° 05' N.; longitude 41° 06' W.

12 m.—Latitude 1° 00' N.; longitude 41° 04' W.

8 p. m.—Latitude 1° 01' N.; longitude 41° 48' W.

APRIL 12.

A. M.	°	°	P. M.	°	°
1	81	80	1	87	81
2	81	80	2	88	81
3	81	80	3	87	81
4	81	80	4	85	81
5	80	80	5	86	81
6	83	80	6	84	81
7	85	80	7	82	81
8	85	80	8	82	81
9	86	80	9	82	81
10	88	81	10	82	81
11	89	81	11	82	81
12	89	81	12	82	81

4 a. m.—Latitude 1° 06' N.; longitude 42° 51' W.

12 m.—Latitude 1° 06' N.; longitude 43° 22' W.

8 p. m.—Latitude 1° 08' N.; longitude 44° 08' W.

APRIL 13.

A. M.	°	°	P. M.	°	°
1	80	81	1	91	82
2	81	81	2	92	83
3	81	81	3	91	83
4	81	81	4	89	83
5	81	81	5	88	82
6	82	81	6	86	82
7	84	81	7	83	82
8	84	81	8	83	81
9	87	81	9	81	81
10	89	81	10	81	81
11	89	81	11	80	81
12	89	82	12	80	81

4 a. m.—Latitude 0° 55' N.; longitude 44° 57' W.

12 m.—Latitude 0° 49' N.; longitude 45° 13' W.

8 p. m.—Latitude 0° 21' N.; longitude 45° 35' W.

Temperature of the air and the surface water—Continued.

APRIL 14.

Hour.	Air.	Water surface.	Hour.	Air.	Water surface.
A. M.	°	°	P. M.	°	°
1	80	82	1	90	82
2	80	82	2	90	82
3	80	82	3	92	84
4	80	82	4	93	83
5	80	80	5	92	83
6	81	80	6	88	83
7	82	81	7	86	82
8	84	81	8	86	82
9	86	82	9	84	82
10	86	81	10	83	81
11	88	82	11	82	81
12	88	82	12	82	81

4 a. m.—Latitude 0° 10' N. ; longitude 45° 58' W.

12 m.—Latitude 0 10 S. ; longitude 46 19 W.

8 p. m.—Latitude 0 33 S. ; longitude 46 37 W.

APRIL 15.

A. M.	°	°	P. M.	°	°
1	81	81	1	91	83
2	81	81	2	91	83
3	81	81	3	88	83
4	81	81	4	88	82
5	80	81	5	86	82
6	80	81	6	86	82
7	86	81	7	84	82
8	86	81	8	82	82
9	88	81	9	80	81
10	90	81	10	80	81
11	90	81	11	80	81
12	92	82	12	80	81

4 a. m.—Latitude 0° 38' S. ; longitude 46° 32' W.

12 m.—Latitude 0 39 S. ; longitude 46 58 W.

8 p. m.—Para river.

APRIL 16.

A. M.	°	°	P. M.	°	°
1	80	81	1	90	81
2	80	81	2	90	82
3	81	81	3	90	82
4	80	82	4	88	82
5	80	81	5	88	82
6	80	81	6	87	82
7	82	81	7	86	82
8	84	81	8	86	82
9	86	82	9	84	81
10	88	82	10	82	81
11	89	83	11	82	81
12	90	83	12	82	81

4 a. m.—Para river.

12 m.—Para river.

8 p. m.—Para river.

Temperature of the air and the surface water—Continued.

APRIL 17.

Hour.	Air.	Water surface.	Hour.	Air.	Water surface.
A. M.	°	°	P. M.	°	°
1	82	81	1	92	82
2	80	81	2	92	82
3	80	81	3	92	82
4	80	81	4	92	81
5	80	81	5	92	81
6	80	81	6	90	81
7	81	82	7	89	81
8	82	82	8	88	81
9	83	82	9	81	81
10	86	82	10	81	81
11	86	83	11	80	80
12	90	84	12	78	80

4 a. m.—Para river.

12 m.—Para river.

8 p. m.—Para river.

APRIL 18.

A. M.	°	°	P. M.	°	°
1	78	81	1	92	81
2	78	81	2	92	81
3	78	81	3	92	81
4	78	81	4	82	81
5	78	81	5	82	..
6	80	81	6	81	..
7	81	81	7	80	..
8	84	81	8	80	..
9	87	81	9	80	..
10	88	81	10	79	..
11	90	82	11	78	..
12	89	83	12	78	..

4 a. m.—Para river.

12 m.—Para river.

8 p. m.—Para river.

APRIL 19.

A. M.	°	°	P. M.	°	°
1	78	..	1	86	..
2	78	..	2	86	..
3	78	..	3	86	..
4	78	..	4	86	..
5	78	..	5	86	..
6	78	..	6	86	..
7	80	..	7	81	..
8	82	..	8	78	..
9	82	..	9	78	..
10	83	..	10	78	..
11	85	..	11	78	..
12	86	..	12	78	..

4 a. m.—Para river.

12 m.—Para river.

8 p. m.—Para river.

Temperature of the air and the surface water—Continued.

APRIL 20.

Hour.	Air.	Water surface.	Hour.	Air.	Water surface.
A. M.	°	°	P. M.	°	°
1	75	..	1	80	..
2	75	74	2	81	..
3	75	..	3	80	..
4	75	74	4	83	..
5	75	..	5	83	..
6	76	..	6	83	..
7	78	..	7	82	..
8	78	..	8	80	..
9	80	..	9	78	..
10	81	..	10	78	..
11	82	..	11	78	..
12	82	..	12	78	..

4 a. m.—Para river.

12 m.—Para river.

8 p. m.—Para river.

APRIL 21.

A. M.	°	°	P. M.	°	°
1	78	..	1	88	..
2	78	..	2	85	..
3	77	..	3	81	..
4	76	..	4	81	..
5	76	..	5	79	..
6	76	..	6	78	..
7	78	..	7	78	80
8	78	..	8	78	80
9	84	..	9	78	81
10	88	..	10	78	81
11	90	..	11	77	81
12	89	..	12	77	81

4 a. m.—Para river.

12 m.—Para river.

8 p. m.—Para river.

APRIL 22.

A. M.	°	°	P. M.	°	°
1	78	81	1	86	82
2	78	80	2	86	83
3	78	80	3	85	83
4	78	80	4	83	82
5	78	80	5	81	81
6	79	80	6	81	81
7	79	80	7	81	81
8	84	82	8	80	81
9	83	81	9	81	81
10	84	81	10	81	81
11	84	81	11	81	81
12	84	81	12	81	81

4 a. m.—Para river.

12 m.—Para river.

8 p. m.—Latitude 0° 10' N.; longitude 48° 10' W.

Temperature of the air and the surface water—Continued.

APRIL 23.

Hour.	Air.	Water surface.	Hour.	Air.	Water surface.
A. M.	°	°	P. M.	°	°
1	80	80	1	78	80
2	80	80	2	79	81
3	79	80	3	80	81
4	79	81	4	80	81
5	79	81	5	81	81
6	79	81	6	81	81
7	80	81	7	78	81
8	80	81	8	78	81
9	81	81	9	78	81
10	81	81	10	78	82
11	81	81	11	78	82
12	81	81	12	78	82

4 a. m.—Latitude 0° 19' N.; longitude 48° 02' W.

12 m.—Latitude 0 28 N.; longitude 48 06 W.

8 p. m.—Latitude 0 32 N.; longitude 47 33 W.

APRIL 24.

A. M.	°	°	P. M.	°	°
1	78	82	1	84	82
2	78	81	2	83	81
3	78	81	3	82	81
4	78	83	4	82	81
5	78	81	5	78	81
6	79	81	6	78	81
7	79	81	7	80	81
8	81	81	8	80	81
9	84	81	9	80	81
10	84	81	10	80	81
11	84	81	11	80	81
12	84	81	12	80	81

4 a. m.—Latitude 0° 24' N.; longitude 47° 39' W.

12 m.—Latitude 0 31 N.; longitude 47 20 W.

8 p. m.—Latitude 0 33 N.; longitude 46 46 W.

APRIL 25.

A. M.	°	°	P. M.	°	°
1	80	81	1	86	82
2	80	81	2	86	82
3	80	81	3	86	82
4	80	81	4	84	81
5	82	81	5	84	81
6	82	81	6	84	81
7	82	81	7	83	81
8	84	81	8	82	81
9	84	81	9	83	81
10	84	81	10	82	81
11	84	81	11	82	81
12	84	81	12	82	81

4 a. m.—Latitude 0° 19' N.; longitude 46° 25' W.

12 m.—Latitude 0 30 N.; longitude 46 07 W.

8 p. m.—Latitude 0 22 N.; longitude 45 42 W.

Temperature of the air and the surface water—Continued.

APRIL 26.

Hour.	Air.	Water surface.	Hour.	Air.	Water surface.
A. M.	°	°	P. M.	°	°
1	82	81	1	86	82
2	82	81	2	86	82
3	82	81	3	84	82
4	82	81	4	85	82
	82	81	5	84	82
6	83	81	6	84	82
7	84	81	7	83	81
8	84	81	8	83	81
9	86	81	9	82	82
10	87	81	10	82	82
11	88	81	11	82	82
12	88	81	12	82	82

4 a. m.—Latitude 1° 00' N.; longitude 46° 19' W.

12 m.—Latitude 0° 55' N.; longitude 45° 56' W.

8 p. m.—Latitude 0° 47' N.; longitude 45° 20' W.

APRIL 27.

A. M.	°	°	P. M.	°	°
1	82	81	1	86	82
2	82	81	2	86	82
3	82	81	3	86	82
4	82	81	4	86	82
5	82	81	5	86	82
6	83	81	6	84	82
7	84	81	7	82	82
8	85	81	8	82	81
9	85	81	9	82	82
10	86	81	10	82	81
11	85	83	11	82	81
12	85	82	12	82	82

4 a. m.—Latitude 0° 42' N.; longitude 45° 04' W.

12 m.—Latitude 0° 50' N.; longitude 45° 00' W.

8 p. m.—Latitude 1° 02' N.; longitude 44° 36' W.

APRIL 28.

A. M.	°	°	P. M.	°	°
1	80	81	1	76	81
2	80	81	2	76	81
3	80	81	3	78	81
4	80	81	4	78	81
5	80	81	5	78	81
6	81	81	6	78	80
7	82	81	7	78	81
8	82	81	8	78	81
9	82	82	9	78	81
10	82	81	10	78	81
11	82	81	11	79	81
12	82	81	12	80	81

4 a. m.—Latitude 1° 14' N.; longitude 44° 12' W.

12 m.—Latitude 1° 15' N.; longitude 43° 59' W.

8 p. m.—Latitude 1° 27' N.; longitude 44° 01' W.

Temperature of the air and the surface water—Continued.

· APRIL 29.

Hour.	Air.	Water surface.	Hour.	Air.	Water surface.
A. M.	°	°	P. M.	°	°
1	80	81	1	88	82
2	80	81	2	86	81
3	80	81	3	85	81
4	80	81	4	85	81
5	80	81	5	84	81
6	81	81	6	84	81
7	82	81	7	82	81
8	83	81	8	82	81
9	86	81	9	81	81
10	86	81	10	81	81
11	87	81	11	81	81
12	89	81	12	81	81

4 a. m.—Latitude 0° 52' N. ; longitude 43° 25' W.

12 m.—Latitude 1 10 N. ; longitude 43 31 W.

8 p. m.—Latitude 1 11 N. ; longitude 43 08 W.

APRIL 30.

A. M.	°	°	P. M.	°	°
1	81	81	1	90	82
2	80	80	2	91	82
3	80	81	3	92	82
4	80	81	4	92	82
5	81	80	5	88	82
6	81	80	6	86	82
7	81	80	7	83	82
8	82	80	8	83	82
9	82	80	9	82	82
10	84	80	10	82	82
11	86	81	11	81	82
12	86	81	12	81	82

4 a. m.—Latitude 1° 14' N. ; longitude 43° 10' W.

12 m.—Latitude 1 08 N. ; longitude 43 17 W.

8 p. m.—Latitude 0 38 N. ; longitude 43 58 W.

MAY 1.

A. M.	°	°	P. M.	°	°
1	81	82	1	79	81
2	81	82	2	79	81
3	80	82	3	79	81
4	78	82	4	79	81
5	77	82	5	80	81
6	77	81	6	80	81
7	78	82	7	80	81
8	77	82	8	80	81
9	76	81	9	79	81
10	78	81	10	79	81
11	78	81	11	79	81
12	78	81	12	80	81

4 a. m.—Latitude 0° 34' N. ; longitude 44° 16' W.

12 m.—Latitude 0 41 N. ; longitude 44 42 W.

8 p. m.—Latitude 0 24 N. ; longitude 45 17 W.

Temperature of the air and the surface water—Continued.

MAY 2.

Hour.	Air.	Water surface.	Hour.	Air.
A. M.	°	°	P. M.	°
1	80	81	1	87
2	80	81	2	88
3	80	81	3	89
4	..	..	4	87
5	78	81	5	84
6	78	81	6	84
7	79	81	7	82
8	80	81	8	82
9	81	81	9	84
10	82	81	10	82
11	84	81	11	80
12	85	81	12	80

4 a. m.—Latitude 0° 28' N. ; longitude 45° 30' W.

12 m.—Latitude 0 13 N. ; longitude 46 03 W.

8 p. m.—Latitude 0 18 S. ; longitude 46 32 W.

MAY 3.

A. M.	°	°	P. M.	°
1	80	81	1	86
2	80	81	2	88
3	80	81	3	86
4	80	81	4	85
5	78	81	5	83
6	78	81	6	82
7	77	81	7	80
8	77	81	8	78
9	77	81	9	80
10	79	81	10	80
11	82	81	11	80
12	85	81	12	79

4 a. m.—Latitude 0° 34' S. ; longitude 46° 35' W.

12 m.—Latitude 0 32 S. ; longitude 46 57 W.

8 p. m.—Para river.

MAY 4.

A. M.	°	°	P. M.	°
1	78	..	1	84
2	78	81	2	86
3	78	..	3	85
4	78	81	4	85
5	78	81	5	84
6	78	81	6	84
7	80	81	7	82
8	80	81	8	82
9	80	81	9	82
10	79	81	10	80
11	80	81	11	81
12	82	81	12	82

4 a. m.—Para river.

12 m.—Para river.

8 p. m.—Para river.

Temperature of the air and the surface water—Continued.

MAY 5.

Hour.	Air.	Water surface.	Hour.	Air.	Water surface.
A. M.	○	○	P. M.	○	○
1	81	81	1	88	81
2	81	81	2	88	81
3	81	81	3	88	81
4	81	81	4	86	82
5	81	81	5	86	82
6	82	81	6	84	82
7	82	81	7	83	82
8	86	82	8	82	82
9	88	82	9	82	81
10	88	83	10	81	81
11	90	84	11	81	81
12	91	83	12	80	81

4 a. m.—Para river.

12 m.—Para river.

8 p. m.—Para river.

MAY 6.

A. M.	○	○	P. M.	○	○
1	80	81	1	92	81
2	80	81	2	92	82
3	80	81	3	92	82
4	80	81	4	90	82
5	78	80	5	88	82
6	78	80	6	84	82
7	78	80	7	84	82
8	80	80	8	84	82
9	86	80	9	82	82
10	88	81	10	82	82
11	88	81	11	80	82
12	..	..	12	80	82

4 a. m.—Para river.

12 m.—Para river.

8 p. m.—Para river.

MAY 7.

A. M.	○	○	P. M.	○	○
1	79	81	1	87	82
2	79	81	2	84	82
3	78	81	3	84	82
4	78	81	4	84	81
5	78	81	5	84	81
6	79	81	6	82	81
7	85	81	7	82	81
8	87	81	8	82	81
9	88	81	9	81	81
10	88	81	10	81	81
11	90	81	11	81	81
12	90	82	12	81	81

4 a. m.—Para river.

12 m.—Para river.

8 p. m.—Para river.

Temperature of the air and the surface water—Continued.

MAY 8.

Hour.	Air.	Water surface.	Hour.	Air.	Water surface.
A. M.	°	°	P. M.	°	°
1	80	81	1	83	81
2	80	81	2	83	81
3	80	81	3	84	81
4	80	81	4	84	81
5	80	81	5	84	81
6	80	81	6	84	81
7	80	81	7	78	81
8	80	81	8	78	81
9	78	81	9	78	81
10	80	81	10	80	81
11	82	81	11	79	81
12	83	81	12	79	81

4 a. m.—Para river.
12 m.—Para river.
8 p. m.—Para river.

MAY 9.

A. M.	°	°	P. M.	°	°
1	78	81	1	86	81
2	78	81	2	86	82
3	78	81	3	86	82
4	78	81	4	86	81
5	77	81	5	85	81
6	77	81	6	85	81
7	80	81	7	84	81
8	82	81	8	83	81
9	83	81	9	80	81
10	85	81	10	80	81
11	85	81	11	79	81
12	85	81	12	79	81

4 a. m.—Para river.
12 m.—Para river.
8 p. m.—Para river.

MAY 10.

A. M.	°	°	P. M.	°	°
1	78	81	1	88	82
2	78	81	2	88	82
3	78	81	3	85	82
4	78	81	4	79	81
5	77	81	5	79	81
6	77	81	6	79	81
7	81	81	7	78	81
8	82	81	8	78	81
9	84	81	9	78	81
10	85	81	10	78	81
11	86	81	11	79	81
12	86	81	12	79	81

4 a. m.—Para river.
12 m.—Para river.
8 p. m.—Para river.

Temperature of the air and the surface water—Continued.

MAY 11.

Hour.	Air.	Water surface.	Hour.	Air.	Water surface.
A. M.	○	○	P. M.	○	○
1	76	81	1	77	81
2	76	81	2	77	81
3	75	81	3	77	80
4	75	81	4	77	80
5	75	81	5	77	80
6	76	81	6	77	80
7	76	81	7	78	80
8	76	81	8	76	80
9	78	80	9	76	80
10	80	80	10	76	80
11	80	80	11	76	80
12	82	80	12	76	80

4 a. m.—Para river.

12 m.—Para river.

8 p. m.—Para river.

MAY 12.

A. M.	○	○	P. M.	○	○
1	76	80	1	88	82
2	76	80	2	..	..
3	75	80	3	..	..
4	75	80	4	90	82
5	75	80	5	88	82
6	75	80	6	86	82
7	76	80	7	82	81
8	76	80	8	82	81
9	82	81	9	80	81
10	84	81	10	80	81
11	84	81	11	78	81
12	84	81	12	78	80

4 a. m.—Para river.

12 m.—Para river.

8 p. m.—Para river.

MAY 13.

A. M.	○	○	P. M.	○	○
1	78	80	1	78	80
2	78	80	2	78	80
3	78	80	3	81	80
4	78	80	4	83	80
5	77	80	5	83	81
6	77	80	6	83	81
7	77	80	7	80	81
8	76	80	8	80	81
9	77	81	9	79	81
10	78	81	10	79	81
11	78	81	11	79	81
12	78	81	12	80	81

4 a. m.—Para river.

12 m.—Para river.

8 p. m.—Para river.

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Temperature of the air and the surface water—Continued.

MAY 14.

Hour.	Air.	Water surface.	Hour.	Air.	
A. M.	°	°	P. M.	°	
1	79	81	1	86	
2	79	81	2	86	
3	79	81	3	84	
4	79	81	4	84	
5	79	81	5	81	
6	79	81	6	80	
7	80	81	7	80	
8	82	81	8	80	
9	86	81	9	80	
10	88	81	10	79	
11	89	82	11	79	
12	88	82	12	79	

4 a. m.—Para river.

12 m.—Para river.

8 p. m.—Para river.

MAY 15.

A. M.	°	°	P. M.	°	
1	78	81	1	84	
2	78	81	2	84	
3	78	81	3	84	
4	78	81	4	84	
5	78	81	5	83	
6	79	81	6	82	
7	80	81	7	81	
8	80	81	8	80	
9	83	81	9	80	
10	86	81	10	80	
11	88	81	11	80	
12	87	82	12	80	

4 a. m.—Para river.

12 m.—Latitude 0° 08' S. ; longitude 48° 06' W.

8 p. m.—Latitude 0 23 N. ; longitude 48 11 W.

MAY 16.

A. M.	°	°	P. M.	°	
1	80	82	1	86	
2	79	82	2	85	
3	80	82	3	84	
4	80	82	4	84	
5	80	82	5	84	
6	81	81	6	83	
7	82	80	7	82	
8	84	80	8	81	
9	85	81	9	78	
10	86	81	10	78	
11	86	81	11	78	
12	86	81	12	78	

4 a. m.—Latitude 1° 06' N ; longitude 48° 43' W.

12 m.—Latitude 1 39 N. ; longitude 48 55 W.

8 p. m.—Latitude 1 49 N. ; longitude 48 39 W.

Temperature of the air and the surface water—Continued.

MAY 17.

Hour.	Air.	Water surface.	Hour.	Air.	Water surface.
A. M.	°	°	P. M.	°	°
1	78	81	1	78	81
2	78	81	2	76	81
3	78	81	3	76	81
4	78	81	4	76	81
5	79	81	5	76	81
6	80	80	6	76	80
7	80	80	7	77	80
8	82	80	8	78	80
9	83	80	9	78	80
10	80	80	10	78	80
11	79	80	11	78	80
12	78	80	12	78	80

4 a. m.—Latitude 1° 57' N.; longitude 48° 39' W.

12 m.—Latitude 1 51 N.; longitude 48 14 W.

8 p. m.—Latitude 2 00 N.; longitude 48 03 W.

MAY 18.

A. M.	°	°	P. M.	°	°
1	78	80	1	84	81
2	78	80	2	84	82
3	78	80	3	84	82
4	78	80	4	80	81
5	78	80	5	80	81
6	80	80	6	79	81
7	81	81	7	77	81
8	84	81	8	76	81
9	84	81	9	79	80
10	86	81	10	79	80
11	86	82	11	79	80
12	84	82	12	79	80

4 a. m.—Latitude 2° 20' N.; longitude 48° 11' W.

12 m.—Latitude 2 29 N.; longitude 48 05 W.

8 p. m.—Latitude 2 31 N.; longitude 47 53 W.

MAY 19.

A. M.	°	°	P. M.	°	°
1	79	80	1	82	80
2	81	80	2	82	80
3	81	80	3	81	80
4	81	80	4	80	80
5	81	80	5	79	81
6	81	80	6	78	81
7	83	80	7	78	81
8	83	80	8	78	81
9	84	80	9	78	81
10	85	81	10	78	80
11	85	81	11	78	80
12	86	81	12	78	80

4 a. m.—Latitude 2° 47' N.; longitude 48° 06' W.

12 m.—Latitude 2 24 N.; longitude 47 44 W.

8 p. m.—Latitude 2 42 N.; longitude 47 43 W.

Temperature of the air and the surface water—Continued

MAY 20.

Hour.	Air.	Water surface.	Hour.	Air.	Water surface.
A. M.	°	°	P. M.	°	°
1	77	80	1	84	81
2	77	80	2	84	81
3	77	80	3	84	81
4	77	80	4	84	81
5	77	80	5	82	81
6	79	80	6	81	81
7	79	..	7	81	81
8	80	81	8	81	81
9	82	81	9	81	81
10	83	81	10	81	81
11	84	81	11	80	81
12	84	81	12	79	81

4 a. m.—Latitude 3° 18' N.; longitude 48° 18' W.

12 m.—Latitude 3 45 N.; longitude 48 13 W.

8 p. m.—Latitude 3 27 N.; longitude 48 03 W.

MAY 21.

A. M.	°	°	P. M.	°	°
1	79	81	1	82	82
2	79	81	2	83	81
3	79	81	3	82	81
4	79	81	4	82	81
5	79	81	5	82	81
6	79	81	6	82	81
7	80	81	7	82	81
8	80	81	8	80	81
9	80	81	9	80	81
10	84	81	10	80	81
11	84	81	11	80	81
12	83	81	12	79	81

4 a. m.—Latitude 3° 35' N.; longitude 48° 05' W.

12 m.—Latitude 3 58 N.; longitude 48 01 W.

8 p. m.—Latitude 4 07 N.; longitude 47 55 W.

MAY 22.

A. M.	°	°	P. M.	°	°
1	80	81	1	82	81
2	80	81	2	81	81
3	80	81	3	80	81
4	79	81	4	78	80
5	79	81	5	78	81
6	79	81	6	77	80
7	79	81	7	78	81
8	81	81	8	79	81
9	82	80	9	78	80
10	82	80	10	78	80
11	83	80	11	78	80
12	83	80	12	78	80

4 a. m.—Latitude 4° 16' N.; longitude 47° 43' W.

12 m.—Latitude 4 39 N.; longitude 47 43 W.

8 p. m.—Latitude 5 18 N.; longitude 47 56 W.

Temperature of the air and the surface water—Continued.

MAY 23.

Hour.	Air.	Water surface.	Hour.	Air.	Water surface.
A. M.	°	°	P. M.	°	°
1	78	80	1	79	80
2	78	80	2	80	80
3	78	80	3	80	80
4	79	80	4	80	80
5	78	80	5	80	80
6	79	80	6	80	80
7	79	80	7	78	80
8	80	80	8	79	80
9	80	80	9	79	80
10	79	80	10	79	80
11	79	80	11	79	80
12	80	80	12	79	80

4 a. m.—Latitude 5° 52' N.; longitude 48° 02' W.

12 m.—Latitude 6 38 N.; longitude 47 54 W.

8 p. m.—Latitude 7 02 N.; longitude 47 45 W.

MAY 24.

A. M.	°	°	P. M.	°	°
1	79	80	1	84	80
2	79	80	2	82	80
3	79	80	3	82	80
4	79	80	4	82	80
5	79	80	5	83	80
6	80	80	6	82	80
7	80	80	7	81	80
8	82	80	8	81	80
9	84	80	9	80	80
10	..	..	10	80	80
11	..	..	11	78	80
12	86	81	12	78	80

4 a. m.—Latitude 7° 34' N.; longitude 47° 51' W.

12 m.—Latitude 8 03 N.; longitude 47 54 W.

8 p. m.—Latitude 8 40 N.; longitude 48 06 W.

MAY 25.

A. M.	°	°	P. M.	°	°
1	78	80	1	86	80
2	78	80	2	86	80
3	78	80	3	85	80
4	78	80	4	85	80
5	78	80	5	83	80
6	80	80	6	83	80
7	82	80	7	80	80
8	83	80	8	80	80
9	84	80	9	79	80
10	85	80	10	79	80
11	86	80	11	79	80
12	86	80	12	80	80

4 a. m.—Latitude 8° 40' N.; longitude 48° 00' W.

12 m.—Latitude 8 53 N.; longitude 47 49 W.

8 p. m.—Latitude 9 34 N.; longitude 47 36 W.

Temperature of the air and the surface water—Continued.

MAY 26.

Hour.	Air.	Water surface.	Hour.	Air.	Water surface.
A. M.	°	°	P. M.	°	°
1	79	80	1	86	80
2	79	80	2	86	80
3	79	80	3	85	80
4	79	81	4	88	80
5	79	81	5	84	80
6	81	80	6	82	80
7	81	80	7	82	79
8	82	80	8	82	79
9	84	80	9	82	79
10	87	80	10	81	79
11	87	80	11	81	79
12	88	80	12	80	79

4 a. m.—Latitude 10° 31' N. ; longitude 47° 41' W.

12 m.—Latitude 10 53 N. ; longitude 47 38 W.

8 p. m.—Latitude 11 46 N. ; longitude 47 43 W.

MAY 27.

A. M.	°	°	P. M.	°	°
1	79	80	1	83	78
2	79	80	2	83	78
3	79	79	3	83	78
4	79	79	4	83	78
5	78	79	5	83	78
6	78	78	6	82	78
7	77	78	7	82	78
8	78	78	8	81	78
9	78	79	9	79	78
10	82	79	10	79	78
11	82	78	11	79	78
12	82	78	12	79	78

4 a. m.—Latitude 12° 42' N. ; longitude 47° 49' W.

12 m.—Latitude 13 49 N. ; longitude 48 06 W.

8 p. m.—Latitude 14 51 N. ; longitude 48 38 W.

MAY 28.

A. M.	°	°	P. M.	°	°
1	78	78	1	84	79
2	78	78	2	86	79
3	78	78	3	86	79
4	78	78	4	86	79
5	78	78	5	84	78
6	79	78	6	84	78
7	80	78	7	80	78
8	81	78	8	80	78
9	82	78	9	79	78
10	84	79	10	78	78
11	84	79	11	78	78
12	84	79	12	78	78

4 a. m.—Latitude 14° 50' N. ; longitude 48° 54' W.

12 m.—Latitude 14 48 N. ; longitude 48 58 W.

8 p. m.—Latitude 15 29 N. ; longitude 49 08 W.

Temperature of the air and the surface water—Continued.

MAY 29.

Hour.	Air.	Water surface.	Hour.	Air.	Water surface.
A. M.	°	°	P. M.	°	°
1	78	78	1	81	78
2	78	78	2	81	78
3	78	78	3	82	78
4	78	78	4	82	..
5	78	78	5	81	..
6	78	78	6	80	..
7	79	78	7	78	78
8	80	78	8	78	78
9	82	78	9	78	78
10	82	78	10	78	78
11	82	78	11	78	78
12	82	78	12	78	78

4 a. m.—Latitude 15° 59' N.; longitude 49° 14' W.
12 m.—Latitude 16 04 N.; longitude 49 30 W.
8 p. m.—Latitude 15 56 N.; longitude 49 49 W.

MAY 30.

A. M.	°	°	P. M.	°	°
1	78	78	1	82	78
2	78	78	2	82	78
3	77	78	3	82	78
4	77	78	4	82	78
5	76	78	5	78	78
6	78	78	6	78	78
7	80	78	7	78	78
8	83	78	8	78	78
9	81	78	9	80	78
10	82	78	10	80	78
11	83	78	11	79	78
12	83	79	12	79	78

4 a. m.—Latitude 15° 23' N.; longitude 50° 29' W.
12 m.—Latitude 14 46 N.; longitude 51 02 W.
8 p. m.—Latitude 14 11 N.; longitude 51 37 W.

MAY 31.

A. M.	°	°	P. M.	°	°
1	78	79	1	84	79
2	78	79	2	84	79
3	78	79	3	84	79
4	79	79	4	84	79
5	79	79	5	83	79
6	81	79	6	82	79
7	82	79	7	80	79
8	84	79	8	80	79
9	84	79	9	80	79
10	84	79	10	80	79
11	84	79	11	80	79
12	84	79	12	80	79

4 a. m.—Latitude 13° 35' N.; longitude 52° 20' W.
12 m.—Latitude 13 04 N.; longitude 52 44 W.
8 p. m.—Latitude 12 41 N.; longitude 53 13 W.

Temperature of the air and the surface water—Continued.

JUNE 1.

Hour.	Air.	Water surface.	Hour.	Air.	Water surface.
A. M.	°	°	P. M.	°	°
1	79	79	1	87	79
2	79	79	2	87	79
3	79	79	3	87	79
4	79	79	4	88	79
5	79	79	5	86	79
6	80	79	6	84	79
7	82	79	7	82	79
8	84	79	8	82	79
9	85	79	9	81	79
10	85	79	10	81	79
11	85	79	11	80	79
12	85	79	12	80	79

4 a. m.—Latitude 12° 06' N.; longitude 53° 40' W.
12 m.—Latitude 11 46 N.; longitude 53 34 W.
8 p. m.—Latitude 11 55 N.; longitude 53 55 W.

JUNE 2.

A. M.	°	°	P. M.	°	°
1	79	79	1	86	81
2	79	79	2	88	81
3	80	80	3	88	81
4	80	79	4	86	80
5	80	79	5	85	79
6	80	79	6	85	80
7	83	79	7	82	80
8	84	79	8	82	80
9	84	79	9	82	80
10	87	80	10	82	80
11	87	81	11	81	80
12	87	81	12	81	80

4 a. m.—Latitude 12° 21' N.; longitude 54° 01' W.
12 m.—Latitude 12 21 N.; longitude 54 29 W.
8 p. m.—Latitude 12 22 N.; longitude 55 09 W.

JUNE 3.

A. M.	°	°	P. M.	°	°
1	82	79	1	88	80
2	82	79	2	86	80
3	82	79	3	86	79
4	82	79	4	85	79
5	82	79	5	84	79
6	82	79	6	83	79
7	83	79	7	82	79
8	84	79	8	82	79
9	84	79	9	82	79
10	84	79	10	82	79
11	84	79	11	82	78
12	86	79	12	82	78

4 a. m.—Latitude 13° 19' N.; longitude 54° 57' W.
12 m.—Latitude 14 10 N.; longitude 54 46 W.
8 p. m.—Latitude 14 54 N.; longitude 54 39 W.

Temperature of the air and the surface water—Continued.

JUNE 4.

Hour.	Air.	Water surface.	Hour.	Air.	Water surface.
A. M.	°	°	P. M.	°	°
1	81	78	1	85	79
2	81	78	2	85	79
3	81	78	3	85	79
4	80	78	4	85	80
5	80	78	5	85	80
6	80	78	6	83	80
7	82	79	7	82	79
8	82	79	8	82	79
9	82	79	9	82	79
10	85	79	10	82	79
11	85	79	11	81	79
12	85	79	12	81	79

4 a. m.—Latitude 15° 33' N.; longitude 54° 39' W.

12 m.—Latitude 15 26 N.; longitude 55 05 W.

8 p. m.—Latitude 15 37 N.; longitude 55 53 W.

JUNE 5.

A. M.	°	°	P. M.	°	°
1	81	79	1	86	80
2	81	80	2	88	80
3	81	80	3	86	80
4	81	80	4	84	79
5	80	79	5	84	79
6	81	79	6	84	79
7	81	79	7	83	79
8	80	79	8	83	79
9	85	79	9	82	79
10	86	79	10	82	79
11	86	79	11	80	79
12	86	80	12	80	79

4 a. m.—Latitude 15° 52' N.; longitude 56° 40' W.

12 m.—Latitude 16 03 N.; longitude 57 21 W.

8 p. m.—Latitude 16 16 N.; longitude 58 06 W.

JUNE 6.

A. M.	°	°	P. M.	°	°
1	80	79	1	83	79
2	80	79	2	85	80
3	80	78	3	85	80
4	80	78	4	85	80
5	80	79	5	85	80
6	82	79	6	83	80
7	83	79	7	82	80
8	83	79	8	82	80
9	84	79	9	80	79
10	86	79	10	80	79
11	86	79	11	80	79
12	86	79	12	80	79

4 a. m.—Latitude 16° 40' N.; longitude 58° 05' W.

12 m.—Latitude 16 51 N.; longitude 58 34 W.

8 p. m.—Latitude 16 50 N.; longitude 58 57 W.

Temperature of the air and the surface water—Continued.

JUNE 7.

Hour.	Air.	Water surface.	Hour.	Air.	Water surface.
A. M.	°	°	P. M.	°	°
1	80	79	1	85	79
2	80	79	2	85	79
3	80	79	3	85	80
4	80	79	4	85	80
5	80	79	5	85	80
6	81	79	6	84	80
7	82	79	7	84	80
8	84	79	8	84	79
9	84	79	9	83	79
10	84	79	10	81	79
11	85	79	11	80	79
12	85	79	12	80	79

4 a. m.—Latitude 16° 38' N.; longitude 58° 51' W.

12 m.—Latitude 16 44 N.; longitude 58 45 W.

8 p. m.—Latitude 16 42 N.; longitude 59 21 W.

JUNE 8.

A. M.	°	°	P. M.	°	°
1	80	79	1	86	80
2	79	79	2	86	80
3	79	79	3	85	80
4	80	79	4	84	79
5	80	79	5	84	79
6	82	79	6	84	79
7	83	79	7	84	79
8	84	79	8	82	79
9	85	79	9	82	79
10	85	79	10	80	79
11	86	79	11	80	79
12	86	79	12	80	79

4 a. m.—Latitude 17° 39' N.; longitude 59° 29' W.

12 m.—Latitude 18 38 N.; longitude 59 31 W.

8 p. m.—Latitude 19 08 N.; longitude 59 34 W.

JUNE 9.

A. M.	°	°	P. M.	°	°
1	80	79	1	84	79
2	80	78	2	84	79
3	80	78	3	83	79
4	80	79	4	83	79
5	79	79	5	83	79
6	81	79	6	82	79
7	83	79	7	82	79
8	85	79	8	82	79
9	84	79	9	80	79
10	84	79	10	80	79
11	84	79	11	80	78
12	84	79	12	80	78

4 a. m.—Latitude 19° 54' N.; longitude 59° 38' W.

12 m.—Latitude 20 44 N.; longitude 59 38 W.

8 p. m.—Latitude 21 30 N.; longitude 59 31 W.

Temperature of the air and the surface water—Continued.

JUNE 10.

Hour.	Air.	Water surface.	Hour.	Air.	Water surface.
A. M.	o	o	P. M.	o	o
1	79	78	1	83	79
2	79	78	2	83	79
3	78	78	3	83	79
4	78	78	4	82	79
5	78	78	5	82	79
6	78	78	6	82	79
7	79	78	7	82	78
8	82	78	8	80	78
9	80	78	9	79	78
10	82	78	10	79	78
11	82	79	11	79	78
12	82	79	12	79	78

4 a. m.—Latitude 22° 23' N.; longitude 59° 32' W.

12 m.—Latitude 23 01 N.; longitude 59 26 W.

8 p. m.—Latitude 23 43 N.; longitude 59 36 W.

JUNE 11.

A. M.	o	o	P. M.	o	o
1	78	78	1	84	78
2	78	78	2	84	78
3	78	78	3	84	78
4	78	78	4	84	77
5	78	78	5	83	77
6	78	78	6	83	77
7	78	78	7	80	77
8	80	78	8	79	77
9	81	78	9	78	77
10	83	78	10	79	77
11	83	78	11	78	77
12	85	78	12	78	77

4 a. m.—Latitude 24° 34' N.; longitude 59° 48' W.

12 m.—Latitude 25 11 N.; longitude 60 00 W.

8 p. m.—Latitude 25 52 N.; longitude 60 09 W.

JUNE 12.

A. M.	o	o	P. M.	o	o
1	78	77	1	80	75
2	78	76	2	80	74
3	78	76	3	80	74
4	76	76	4	80	76
5	76	76	5	80	76
6	78	77	6	80	76
7	78	77	7	74	76
8	80	77	8	74	76
9	78	77	9	74	76
10	78	76	10	74	76
11	80	76	11	74	76
12	80	76	12	74	76

4 a. m.—Latitude 26° 28' N.; longitude 60° 08' W.

12 m.—Latitude 26 22 N.; longitude 60 04 W.

8 p. m.—Latitude 25 34 N.; longitude 60 05 W.

Temperature of the air and the surface water—Continued.

JUNE 13.

Hour.	Air.	Water surface.	Hour.	Air.	Water surface.
A. M.	°	°	P. M.	°	°
1	74	76	1	81	77
2	74	76	2	81	77
3	74	76	3	80	77
4	74	76	4	78	77
5	74	76	5	78	77
6	78	76	6	78	77
7	83	76	7	78	77
8	81	77	8	78	76
9	80	79	9	78	76
10	82	79	10	78	76
11	82	79	11	78	76
12	81	78	12	78	76

4 a. m.—Latitude 25° 01' N.; longitude 60° 30' W.

12 m.—Latitude 24 36 N.; longitude 60 45 W.

8 p. m.—Latitude 24 03 N.; longitude 61 04 W.

JUNE 14.

A. M.	°	°	P. M.	°	°
1	78	76	1	80	78
2	78	76	2	80	78
3	78	77	3	80	78
4	78	77	4	80	78
5	78	77	5	81	78
6	78	77	6	81	78
7	77	77	7	80	78
8	80	77	8	80	78
9	81	77	9	79	78
10	81	77	10	79	78
11	82	77	11	79	78
12	82	77	12	79	78

4 a. m.—Latitude 24° 13' N.; longitude 61° 12' W.

12 m.—Latitude 24 20 N.; longitude 61 40 W.

8 p. m.—Latitude 24 13 N.; longitude 61 50 W.

JUNE 15.

A. M.	°	°	P. M.	°	°
1	79	77	1	77	77
2	78	78	2	78	77
3	78	78	3	80	77
4	78	78	4	80	78
5	78	78	5	80	78
6	78	78	6	..	78
7	78	78	7	79	78
8	75	78	8	79	78
9	75	77	9	76	78
10	75	77	10	76	77
11	75	77	11	76	77
12	76	77	12	76	77

4 a. m.—Latitude 24° 27' N.; longitude 62° 44' W.

12 m.—Latitude 24 28 N.; longitude 63 03 W.

8 p. m.—Latitude 24 32 N.; longitude 63 49 W.

Temperature of the air and the surface water—Continued.

JUNE 16.

Hour.	Air.	Water surface.	Hour.	Air.	Water surface.
A. M.	°	°	P. M.	°	°
1	76	77	1	82	79
2	76	77	2	82	79
3	75	77	3	82	79
4	75	76	4	80	79
5	75	76	5	78	79
6	75	76	6	78	78
7	78	76	7	78	79
8	80	76	8	78	79
9	80	78	9	77	79
10	82	78	10	77	79
11	82	78	11	77	79
12	84	78	12	77	79

4 a. m.—Latitude 24° 36' N.; longitude 64° 25' W.

12 m.—Latitude 24 34 N.; longitude 64 25 W.

8 p. m.—Latitude 24 39 N.; longitude 64 43 W.

JUNE 17.

A. M.	°	°	P. M.	°	°
1	78	79	1	85	82
2	78	79	2	85	82
3	79	79	3	85	82
4	79	79	4	85	81
5	78	79	5	84	80
6	80	79	6	83	80
7	81	79	7	81	80
8	84	79	8	80	80
9	85	79	9	79	79
10	85	79	10	76	79
11	86	79	11	76	79
12	86	79	12	76	79

4 a. m.—Latitude 24° 35' N.; longitude 64° 56' W.

12 m.—Latitude 24 32 N.; longitude 65 13 W.

8 p. m.—Latitude 24 34 N.; longitude 65 30 W.

JUNE 18.

A. M.	°	°	P. M.	°	°
1	77	79	1	77	79
2	77	79	2	79	79
3	77	79	3	79	79
4	77	79	4	79	79
5	78	79	5	79	79
6	78	79	6	79	79
7	80	79	7	79	79
8	81	79	8	80	79
9	81	79	9	80	79
10	81	79	10	80	79
11	78	78	11	80	79
12	78	78	12	78	79

4 a. m.—Latitude 24° 48' N.; longitude 65° 22' W.

12 m.—Latitude 24 43 N.; longitude 65 16 W.

8 p. m.—Latitude 24 44 N.; longitude 65 21 W.

Temperature of the air and the surface water—Continued.

JUNE 19.

Hour.	Air.	Water surface.	Hour.	Air.	Water surface.
A. M.	°	°	P. M.	°	°
1	78	79	1	87	80
2	77	79	2	87	80
3	77	79	3	85	80
4	77	79	4	84	80
5	79	79	5	84	80
6	80	79	6	84	80
7	80	79	7	83	80
8	80	79	8	83	79
9	83	79	9	81	79
10	84	80	10	81	79
11	87	79	11	80	79
12	90	80	12	80	79

4 a. m.—Latitude 24° 58' N.; longitude 65° 14' W.
 12 m.—Latitude 25 02 N.; longitude 64 48 W.
 8 p. m.—Latitude 24 56 N.; longitude 64 59 W.

JUNE 20.

A. M.	°	°	P. M.	°	°
1	80	79	1	82	79
2	80	79	2	82	79
3	80	79	3	82	79
4	80	79	4	81	79
5	79	79	5	81	79
6	78	79	6	79	79
7	85	79	7	79	79
8	85	80	8	79	79
9	77	80	9	79	79
10	78	80	10	79	79
11	82	80	11	79	79
12	82	80	12	78	79

4 a. m.—Latitude 24° 41' N.; longitude 65° 17' W.
 12 m.—Latitude 24 40 N.; longitude 65 13 W.
 8 p. m.—Latitude 24 35 N.; longitude 65 11 W.

JUNE 21.

A. M.	°	°	P. M.	°	°
1	79	79	1	84	79
2	79	79	2	85	79
3	79	79	3	85	79
4	79	79	4	82	79
5	79	79	5	81	79
6	80	79	6	81	79
7	80	79	7	80	79
8	81	79	8	80	80
9	82	79	9	79	79
10	80	79	10	78	78
11	79	79	11	78	78
12	80	79	12	78	79

4 a. m.—Latitude 25° 03' N.; longitude 65° 56' W.
 12 m.—Latitude 25 13 N.; longitude 66 52 W.
 8 p. m.—Latitude 25 32 N.; longitude 67 01 W.

Temperature of the air and the surface water—Continued.

JUNE 22.

Hour.	Air.	Water surface.	Hour.	Air.	Water surface.
A. M.	°	°	P. M.	°	°
1	78	79	1	77	78
2	78	79	2	77	78
3	77	79	3	77	78
4	77	79	4	78	77
5	77	78	5	81	78
6	78	78	6	80	78
7	80	78	7	80	78
8	80	78	8	80	77
9	80	78	9	76	77
10	83	78	10	76	77
11	84	78	11	77	77
12	84	78	12	77	77

4 a. m.—Latitude 25° 45' N.; longitude 67° 04' W.

12 m.—Latitude 26 18 N.; longitude 67 24 W.

8 p. m.—Latitude 26 48 N.; longitude 67 35 W.

JUNE 23.

A. M.	°	°	P. M.	°	°
1	78	77	1	84	79
2	78	77	2	84	79
3	78	77	3	84	79
4	78	77	4	85	79
5	78	77	5	85	79
6	79	77	6	83	79
7	79	77	7	81	79
8	79	77	8	80	79
9	80	77	9	80	79
10	81	78	10	80	79
11	82	78	11	80	79
12	83	78	12	80	79

4 a. m.—Latitude 27° 19' N.; longitude 68° 04' W.

12 m.—Latitude 27 38 N.; longitude 68 10 W.

8 p. m.—Latitude 28 03 N.; longitude 68 27 W.

JUNE 24.

A. M.	°	°	P. M.	°	°
1	79	79	1	84	79
2	79	78	2	84	79
3	79	78	3	84	79
4	79	78	4	84	79
5	76	78	5	84	79
6	76	78	6	84	79
7	80	78	7	81	78
8	81	79	8	80	78
9	84	79	9	79	78
10	84	79	10	79	78
11	84	79	11	79	78
12	84	79	12	79	78

4 a. m.—Latitude 28° 36' N.; longitude 68° 51' W.

12 m.—Latitude 29 03 N.; longitude 69 05 W.

8 p. m.—Latitude 29 47 N.; longitude 69 32 W.

Temperature of the air and the surface water—Continued.

JUNE 25.

Hour.	Air.	Water surface.	Hour.	Air.	Water surface.
A. M.	°	°	P. M.	°	°
1	78	78	1	81	75
2	77	78	2	80	76
3	77	78	3	80	76
4	77	78	4	81	77
5	76	78	5	79	76
6	79	75	6	78	75
7	80	74	7	79	75
8	80	75	8	78	75
9	80	75	9	77	75
10	80	75	10	77	75
11	80	75	11	77	75
12	80	75	12	77	74

4 a. m.—Latitude 30° 32' N. ; longitude 70° 06' W.
12 m.—Latitude 31 12 N. ; longitude 70 27 W.
8 p. m.—Latitude 32 04 N. ; longitude 71 03 W.

JUNE 26.

A. M.	°	°	P. M.	°	°
1	71	74	1	73	72
2	70	74	2	73	73
3	70	74	3	73	73
4	70	74	4	73	72
5	70	74	5	72	72
6	70	73	6	72	72
7	70	73	7	72	72
8	71	73	8	71	72
9	72	73	9	70	72
10	73	74	10	70	72
11	73	73	11	71	72
12	73	72	12	71	72

4 a. m.—Latitude 32° 17' N. ; longitude 71° 32' W.
12 m.—Latitude 32 49 N. ; longitude 72 02 W.
8 p. m.—Latitude 33 23 N. ; longitude 72 32 W.

JUNE 27.

A. M.	°	°	P. M.	°	°
1	71	72	1	73	77
2	70	73	2	73	79
3	70	73	3	73	78
4	70	74	4	73	78
5	71	74	5	73	78
6	72	73	6	73	78
7	72	74	7	73	79
8	73	75	8	72	80
9	72	76	9	73	79
10	74	76	10	73	79
11	74	76	11	73	73
12	74	78	12	73	72

4 a. m.—Latitude 34° 03' N. ; longitude 73° 07' W.
12 m.—Latitude 34 38 N. ; longitude 73 46 W.
8 p. m.—Latitude 35 24 N. ; longitude 73 41 W.

Temperature of the air and the surface water—Continued.

JUNE 28.

Hour.	Air.	Water surface.	Hour.	Air.	Water surface.
A. M.	°	°	P. M.	°	°
1	73	72	1	74	70
2	73	72	2	74	70
3	73	72	3	74	71
4	73	72	4	73	70
5	72	72	5	72	70
6	72	70	6	72	70
7	72	69	7	72	70
8	75	70	8	72	70
9	73	70	9	72	69
10	76	70	10	72	69
11	75	70	11	72	69
12	75	..	12	70	69

4 a. m.—Latitude 35° 51' N.; longitude 73° 39' W.

12 m.—Latitude 36 00 N.; longitude 73 52 W.

8 p. m.—Latitude 36 10 N.; longitude 73 59 W.

JUNE 29.

A. M.	°	°	P. M.	°	°
1	70	68	1	72	69
2	70	68	2	72	69
3	70	68	3	72	69
4	70	68	4	70	69
5	70	66	5	71	69
6	71	67	6	71	68
7	70	68	7	71	68
8	70	68	8	70	68
9	71	68	9	70	68
10	72	68	10	70	67
11	74	68	11	70	68
12	76	68	12	70	68

4 a. m.—Latitude 36° 24' N.; longitude 74° 37' W.

12 m.—Latitude 37 00 N.; longitude 74 28 W.

8 p. m.—Latitude 37 36 N.; longitude 74 28 W.

JUNE 30.

A. M.	°	°	P. M.	°	°
1	70	67	1	74	68
2	70	67	2	75	69
3	70	67	3	75	69
4	70	67	4	75	69
5	69	67	5	75	68
6	70	67	6	73	67
7	72	67	7	70	68
8	73	67	8	70	67
9	72	68	9	70	68
10	73	68	10	70	61
11	73	68	11	66	63
12	73	68	12	64	61

4 a. m.—Latitude 38° 06' N.; longitude 74° 14' W.

12 m.—Latitude 38 35 N.; longitude 74 07 W.

8 p. m.—Latitude 39 22 N.; longitude 73 52 W.

Temperature of the air and of the water at the surface and at given d
first, in the tropics ; second, in the Gulf Stream ; and third, in the
temperate zone of the Atlantic ; with the mean temperature in each

TROPICS.

Date.	Temp. air.	Temperature of water.				
		Surface.	10 fathoms.	80 to 100 fathoms.	200 fathoms.	34 fms.
1851.	○	○	○	○	○	
December 5.....	76	75	..	..	70	
6.....	73	75	..	..	67	
7.....	76	75	..	..	66	
8.....	75	75	..	..	58	
10.....	73	75	..	..	65	
11.....	73	75	..	..	65	
13.....	80	75	..	..	67	
14.....	76	75	..	..	70	
15.....	75	73	..	..	64	
15.....	77	74	..	..	67	
16.....	71	74	..	..	62	
16.....	74	75	..	61	63	
17.....	75	73	..	..	73	
17.....	80	74	..	..	62	
1852.						
January 3.....	79	75	..	..	62	
6.....	76	75	..	..	65	
7.....	76	75	..	..	64	
8.....	83	78	..	..	64	
9.....	83	78	..	..	69	
10.....	85	80	..	..	70	
11.....	85	81	..	..	66	
12.....	82	81	..	..	64	
13.....	77	78	..	..	67	
14.....	87	79	..	..	70	
16.....	78	80	..	..	69	
17.....	78	80	..	..	65	
18.....	80	81	..	..	66	
19.....	82	80	..	..	67	
20.....	81	79	..	..	74	
21.....	81	78	..	..	70	
22.....	83	79	..	..	73	
23.....	80	78	..	..	66	
24.....	81	78	..	..	69	
25.....	80	78	..	..	65	
27.....	85	79	..	..	75	
29.....	83	78	..	..	70	
30.....	89	80	..	..	65	
31.....	81	79	..	..	64	
February 2.....	85	79	..	..	69	
3.....	86	79	..	..	69	
4.....	86	80	..	..	70	
5.....	87	80	..	..	70	
7.....	86	81	..	67	65	
8.....	90	82	..	65	62	
9.....	92	81	..	64	62	
11.....	83	80	..	..	64	
13.....	85	79	..	..	68	
14.....	80	78	..	65	..	
15.....	82	79	..	69	..	
15.....	86	79	..	..	69	
16.....	86	80	{ 78 78	77 68	71 67	

of the air and water in the tropics, &c.—Continued.

TROPICS—Continued.

Temp. air.	Temperature of water.				
	Surface.	10 fathoms.	80 to 100 fathoms.	200 fathoms.	345 to 400 fathoms.
°	°	°	°	°	°
..	78	77	67	65	64
..	79	79	67	67	67
..	80	..	70	..	..
..	79	..	68	64	63
..	80	79	67	66	60
..	79	..	70	63	63
..	79	..	77	67	64
..	80	..	77	71	71
..	80	..	75	72	..
..	81	..	72	67	63
..	81	79	72	67	64
..	80	80	{ 71	..	..
..	81	..	{ 75	75	..
..	80	..	{ 78	75	..
..	81	..	{ 69	68	65
..	80	..	{ 73	..	..
..	81	9.	{ 71	..	..
..	81	..	73	..	..
..	81	..	70	71	66
..	81	..	72	71	70
..	82	..	77	79	75
..	82	..	77	72	..
..	81	..	78	74	72
..	82	..	74	71	70
..	82	..	77	74	75
..	82	..	73	68	64
..	81	..	72	69	65
..	81	..	68	66	61
..	82	..	72	69	67
..	80	..	74	74	69
..	81	..	75	75	69
..	80	..	79	74	72
..	81	..	79	73	71
..	81	..	76	73	74
..	81	..	78	75	71
..	81	..	79	73	72
..	81	..	74	71	69
..	80	78	75	71	67
..	80	..	76	72	69
..	80	..	..	..	72
..	79	..	78	77	76
..	78	..	77	76	74
..	78	77	75	70	68
..	78	77	76	73	68
..	79	78	76	72	74
..	79	78	76	73	67
..	79	78	76	77	73
..	79	78	74	72	72
..	81	79	76	72	72
..	80	79	76	70	72
..	79	79	78	76	73
..	79	79	72	69	64
..	79	78	76	74	73
..	80	79	77	75	74
..	79	79	77	74	71
..	79	..	..	75	..

Temperature of the air and water in the tropics, &c.—Continued.

TROPICS—Continued.

Date.	Temp. air.	Temperature of water.				
		Surface.	10 fathoms.	80 to 100 fathoms.	200 fathoms.	345 to 400 fathoms.
1852.	○	○	○	○	○	○
June 9.....	83	79	79	75	73	71
10.....	80	78	77	76	76	..
10.....	82	79	78	71	72	..
11.....	78	78	77	75	73	71
11.....	82	77	..	..	72	..
Total.....	9032	8766	2036	4988	7429	6509
Number of casts.....	110	111	26	68	107	98
Mean.....	82°	79°	78½°	73½°	69½°	66½°

●
GULF STREAM.

Date.	Temp. air.	Temperature of water.				
		Surface.	10 fathoms.	80 to 100 fathoms.	200 fathoms.	345 to 400 fathoms.
1851.	○	○	○	○	○	○
October 11.....	71	75	..	..	57	..
15.....	68	74	..	..	53	47
17.....	60	76	..	..	..	51
18.....	67	71	..	..	..	61
20.....	71	74	..	..	70	..
21.....	72	73	..	..	69	66
1852.						
June 27.....	70	74	73	69	67	67
27.....	74	78	76	72	72	..
27.....	72	80	79	73	74	..
Total.....	625	675	228	214	462	292
Number of casts.....	9	9	3	3	7	5
Mean.....	69½°	75°	76°	71°	66°	58½°

Temperature of the air and water in the tropics, &c.—Continued.

MEAN TEMPERATURE IN THE TROPICS AND GULF STREAM.

	Temp. air.	Temperature of water.				
		Surface.	10 fathoms.	80 to 100 fathoms.	200 fathoms.	345 to 400 fathoms.
.....	9032	8766	2036	4988	7429	6509
Stream.....	625	675	228	214	462	292
.....	9657	9441	2264	5202	7891	6801
er of casts.....	119	120	29	71	114	103
.....	81°	78½°	78°	73°¼	69¼°	66°

Temperature of the air and water in the tropics, &c.—Continued.

NORTH TEMPERATE ZONE.

Date.	Temp. air.	Temperature of water.				
		Surface.	10 fathoms.	80 to 100 fathoms.	200 fathoms.	345 to fathoms.
1851.	0	0	0	0	0	0
October 10.....	69	65	..	..	56	..
10.....	71	66	..	62	54	..
25.....	71	73	..	..	66	66
November 2.....	72	74	..	..	71	66
6.....	75	72	..	..	66	59
13.....	65	73	..	..	67	68
15.....	67	70	..	..	66	68
17.....	69	71	..	..	66	63
18.....	69	70	..	..	67	65
19.....	73	70	..	..	67	64
20.....	72	70	..	..	66	59
22.....	70	71	..	..	64	59
23.....	75	73	..	..	69	65
24.....	77	74	..	..	66	63
27.....	77	74	..	..	69	63
28.....	79	74	..	..	69	62
29.....	76	75	..	..	68	66
30.....	72	73	..	..	68	66
1852.						
June 11.....	78	78	77	75	73	71
11.....	82	77	..	..	72	..
12.....	76	76	76	73	72	70
14.....	80	78	78	72	72	76
15.....	75	78	76	71	69	68
15.....	80	78	77	75	72	70
17.....	83	80	..	..	77	..
19.....	77	80	78	76	75	72
21.....	82	79	79	77	71	69
22.....	78	78	78	75	72	68
23.....	78	77	77	73	74	70
24.....	84	79	79	75	74	70
25.....	76	78	74	72	70	69
25.....	78	75	74	71	71	69
26.....	70	74	73	69	70	69
26.....	73	73	73	68	66	67
26.....	71	72	..	64	..	..
Total.....	2620	2598	1069	1148	2335	1994
Number of casts.....	35	35	14	16	34	30
Mean.....	75°	74½°	76½°	71½°	68½°	66½°

List of specimens of salt water at the surface, and at various depths, with latitude and longitude of each specimen.

Date.	Hour.	Latitude.	Longitude.	Surface.		200 fathoms.		300 fathoms.		400 fathoms.		600 fathoms.	
				No. of specimens.	Specific gravity.	No. of specimens.	Specific gravity.	No. of specimens.	Specific gravity.	No. of specimens.	Specific gravity.	No. of specimens.	Specific gravity.
1851.	October	North. " O 38 53 11	West. " O 71 47 08	1	.....	1	.....	.....	.....	.....	.....	.....	.....
	10.....	38 53 11	71 47 08	1	.....	1	.....	.....	.....	.....	.....	.....	.....
	15.....	38 14 16	66 42 35	1	.....	.....	.....	.....	.....	.....	.....	.....	.....
	17.....	37 53 30	66 48 05	1	.....	1	.....	.....	.....	.....	.....	.....	.....
	21.....	36 58 00	66 12 28	1	.....	.....	.....	.....	.....	1	.....	.....	.....
November	2.....	32 46 00	59 56 20	1	.....	.....	.....	.....	.....	1	.....	.....	.....
	6.....	32 46 00	60 05 08	1	.....	.....	.....	.....	.....	1	.....	.....	.....
	13.....	32 06 00	58 40 52	1	.....	.....	.....	.....	.....	1	.....	.....	.....
	15.....	31 17 00	53 21 55	1	.....	.....	.....	.....	.....	1	.....	.....	.....
	17.....	31 03 43	50 06 34	1	.....	.....	.....	.....	.....	1	.....	.....	.....
	19.....	31 03 47	43 46 24	1	.....	.....	.....	.....	.....	1	.....	.....	.....
	20.....	29 45 30	42 04 27	1	.....	.....	.....	.....	.....	1	.....	.....	.....
	22.....	27 54 12	40 33 12	1	.....	.....	.....	.....	.....	1	.....	.....	.....
	22.....	27 39 42	40 17 01	1	.....	.....	.....	.....	.....	.....	.....	1	.....
	23.....	26 42 42	38 38 38	1	.....	.....	.....	.....	.....	1	.....	.....	.....
	24.....	25 30 22	37 43 56	1	.....	.....	.....	.....	.....	1	.....	.....	.....
	27.....	25 30 00	37 42 43	1	.....	.....	.....	.....	.....	1	.....	.....	.....
December	28.....	25 04 00	36 12 53	1	.....	.....	.....	.....	.....	1	.....	.....	.....
	29.....	24 23 40	33 54 40	1	.....	1	.....	.....	.....	1	.....	.....	.....
	30.....	23 42 12	32 39 00	1	.....	1	.....	.....	.....	1	.....	.....	.....
	30.....	23 41 12	32 39 05	.....	.....	.....	.....	.....	.....	.....	.....	1	.....
	1.....	23 15 03	32 24 32	1	.....	.....	.....	.....	.....	1	.....	.....	.....
	3.....	24 08 00	32 07 12	1	.....	.....	.....	.....	.....	1	.....	.....	.....
	5.....	21 27 20	29 09 12	1	.....	.....	.....	.....	.....	1	.....	.....	.....
	6.....	20 02 54	27 33 30	1	.....	.....	.....	.....	.....	1	.....	.....	.....
	7.....	18 39 26	25 24 16	1	.....	.....	.....	.....	.....	1	.....	.....	.....
	8.....	17 38 23	23 48 00	1	.....	1	.....	.....	.....	1	.....	.....	.....

List of specimens of salt water at the surface, and at various depths—Continued.

Date.	Hour.	Latitude.	Longitude.	Surface.		50 fathoms.		100 fathoms.		200 fathoms.		400 fathoms.	
				No. of specimens.	Specific gravity.	No. of specimens.	Specific gravity.	No. of specimens.	Specific gravity.	No. of specimens.	Specific gravity.	No. of specimens.	Specific gravity.
1851. December 10	9.20 a. m..	18 11 23	West. " 23 48 28	1	.....		.....		.....	1	.....	1	.....
	9 a. m.....	17 34 31	22 50 27	1	.....		.....		.....	1	.....	1	.....
	0.40 p. m..	16 29 31	20 58 01	1	.....		.....		.....		.....	1	.....
	8.40 a. m..	16 34 10	20 47 36	1	.....		.....		.....	1	.....	1	.....
	7½ a. m.....	16 59 00	21 18 00	1	.....		.....		.....	1	.....		.....
	0.20 p. m..	16 59 00	21 38 02	1	.....		.....		.....	1	.....	1	.....
	6 a. m.....	15 24 08	21 46 48	1	.....		.....		.....	1	.....	1	.....
	4½ p. m.....	15 09 20	22 28 48		.....	1	.....	1	.....	1	.....	1	.....
	7½ a. m.....	15 08 00	22 56 57		.....		.....		.....	1	.....	1	.....
	½ p. m.....	15 02 57	23 12 51	1	.....	1	.....		.....	1	.....		.....
				
				
				
				
1852. January 3	m.....	14 45 55	23 50 24	1	.....		.....		.....	1	.....	1	.....
	11½ a. m...	13 01 30	22 57 42	1	.....		.....		.....	1	.....	1	.....
	7½ a. m.....	11 07 15	21 56 54	1	.....		.....		.....	1	.....	1	.....
	10 a. m.....	8 43 00	20 52 00	1	.....		.....		.....	1	.....	1	.....
	10 a. m.....	7 17 00	20 07 00	1	.....		.....		.....	1	.....	1	.....
	3½ p. m.....	5 36 30	19 34 46	1	.....		.....		.....	1	.....	1	.....
	4 p. m.....	4 27 00	19 21 15	1	.....		.....		.....	1	.....	1	.....
	3½ p. m.....	4 05 10	19 15 28	1	.....		.....		.....	1	.....	1	.....
	1 p. m.....	4 14 21	19 20 27	1	.....		.....		.....	1	.....	1	.....
	4 p. m.....	3 42 18	19 06 00	1	.....		.....		.....	1	.....	1	.....
	4½ p. m.....	3 03 00	18 49 39	1	.....		.....		.....	1	.....	1	.....
	8½ a. m.....	3 01 26	18 36 26	1	.....		.....		.....	1	.....	1	.....
	4½ p. m.....	2 26 09	19 22 00	1	.....		.....		.....	1	.....	1	.....
	10 a. m.....	2 10 00	19 57 23	1	.....		.....		.....	1	.....	1	.....

South.		North.		South.	
21	9 a. m.	0	34	20	18
22	9 a. m.	2	37	23	40
23	9 a. m.	4	38	24	37
24	9 a. m.	5	40	25	46
25	9 a. m.	6	42	26	45
26	9 a. m.	7	43	27	30
27	9 a. m.	8	44	28	54
28	9 a. m.	9	45	29	31
29	9 a. m.	10	46	30	38
30	9 a. m.	11	47	31	27
31	9 a. m.	12	48	1	40
1	9 a. m.	13	49	2	36
2	9 a. m.	14	50	3	28
3	9 a. m.	15	51	4	19
4	9 a. m.	16	52	5	42
5	9 a. m.	17	53	6	34
6	9 a. m.	18	54	7	25
7	9 a. m.	19	55	8	16
8	9 a. m.	20	56	9	7
9	9 a. m.	21	57	10	0
10	9 a. m.	22	58	11	1
11	9 a. m.	23	59	12	2
12	9 a. m.	24	60	13	3
13	9 a. m.	25	61	14	4
14	9 a. m.	26	62	15	5
15	9 a. m.	27	63	16	6
16	9 a. m.	28	64	17	7
17	9 a. m.	29	65	18	8
18	9 a. m.	30	66	19	9
19	9 a. m.	31	67	20	10
20	9 a. m.	32	68	21	11
21	9 a. m.	33	69	22	12
22	9 a. m.	34	70	23	13
23	9 a. m.	35	71	24	14
24	9 a. m.	36	72	25	15
25	9 a. m.	37	73	26	16
26	9 a. m.	38	74	27	17
27	9 a. m.	39	75	28	18
28	9 a. m.	40	76	29	19
29	9 a. m.	41	77	30	20
30	9 a. m.	42	78	31	21
31	9 a. m.	43	79	1	22
1	9 a. m.	44	80	2	23
2	9 a. m.	45	81	3	24
3	9 a. m.	46	82	4	25
4	9 a. m.	47	83	5	26
5	9 a. m.	48	84	6	27
6	9 a. m.	49	85	7	28
7	9 a. m.	50	86	8	29
8	9 a. m.	51	87	9	30
9	9 a. m.	52	88	10	31
10	9 a. m.	53	89	11	32
11	9 a. m.	54	90	12	33
12	9 a. m.	55	91	13	34
13	9 a. m.	56	92	14	35
14	9 a. m.	57	93	15	36
15	9 a. m.	58	94	16	37
16	9 a. m.	59	95	17	38
17	9 a. m.	60	96	18	39
18	9 a. m.	61	97	19	40
19	9 a. m.	62	98	20	41
20	9 a. m.	63	99	21	42
21	9 a. m.	64	100	22	43
22	9 a. m.	65	101	23	44
23	9 a. m.	66	102	24	45
24	9 a. m.	67	103	25	46
25	9 a. m.	68	104	26	47
26	9 a. m.	69	105	27	48
27	9 a. m.	70	106	28	49
28	9 a. m.	71	107	29	50
29	9 a. m.	72	108	30	51
30	9 a. m.	73	109	31	52
31	9 a. m.	74	110	1	53
1	9 a. m.	75	111	2	54
2	9 a. m.	76	112	3	55
3	9 a. m.	77	113	4	

List of specimens of *gull water at the surface, and at various depths*—Continued

Date.	Hour.	Latitude.	Longitude.	Surface.		50 fathoms.		100 fathoms.		200 fathoms.		400 fathoms.	
				No. of specimens.	Specific gravity.	No. of specimens.	Specific gravity.	No. of specimens.	Specific gravity.	No. of specimens.	Specific gravity.	No. of specimens.	Specific gravity.
1852. April	14.....	0 19 58	46 28 37	1	.....		.....		.....		.....		.....
	16.....	0 25 00	47 50 00	1	.....		.....		.....		.....		.....
	21.....	1 14 00	48 26 00	1	.....		.....		.....		.....		.....
	22.....	0 32 00	48 00 00	1	.....		.....		.....		.....		.....
	22.....	0 13 00	48 00 00	1	.....		.....		.....		.....		.....
	22.....	.....	.....	.....	.....		.....		.....		.....		.....
1852. April	22.....	0 13 10	48 11 04	1	.....		.....		.....		.....		.....
	23.....	0 27 56	48 06 29	1	.....		.....		.....		.....		.....
	23.....	0 32 24	47 33 17	1	.....		.....		.....		.....		.....
	24.....	0 27 35	47 37 30	1	.....		.....		.....		.....		.....
	24.....	0 30 32	46 55 40	1	.....		.....		.....		.....		.....
	24.....	0 34 04	46 41 34	1	.....		.....		.....		.....		.....
	25.....	0 20 58	46 15 55	1	.....		.....		.....		.....		.....
	25.....	0 29 58	45 58 33	1	.....		.....		.....		.....		.....
	25.....	0 19 01	45 43 36	1	.....		.....		.....		.....		.....
	26.....	1 01 29	46 17 46	1	.....		.....		.....		.....	1	.....
	28.....	1 10 04	44 10 45	1	.....		.....		.....		.....	1	.....
	28.....	0 54 39	43 35 41	1	.....		.....		.....		.....	1	.....
	28.....	.....	.....	.....	.....		.....		.....		.....	.....	.....
	28.....	.....	.....	.....	.....		.....		.....		.....	.....	.....

List of specimens of salt water at the surface, and at various depths—Continued.

Date.	Hour.	Latitude.	Longitude.	Surface.		10 fathoms.		80 to 100 fathoms.		200 fathoms.		345 to 400 fathoms	
				No. of specimens.	Specific gravity.	No. of specimens.	Specific gravity.	No. of specimens.	Specific gravity.	No. of specimens.	Specific gravity.	No. of specimens.	Specific gravity.
1852. May	20.....	North. " 3 39 08	West. " 48 12 47	1	.....	.....	.....	.....	.....	.....	.....	.....	.....
	24.....	7 57 43	47 51 24	1	.....	1	.....	1	.....	1	.....	1	.....
	26.....	10 38 13	47 40 00	1	.....	1	.....	1	.....	1	.....	1	.....
	26.....	11 11 42	47 37 38	1	.....	.....	.....	.....	.....	.....	.....	1	.....
	19.....	2 36 52	47 45 02	1	.....	.....	.....	.....	.....	.....	.....	.....	.....
	28.....	15 00 15	48 58 30	1	.....	1	.....	1	.....	1	.....	.....	.....
	29.....	15 55 40	49 34 02	1	.....	1	.....	1	.....	1	.....	.....	.....
	30.....	15 16 05	50 34 33	1	.....	1	.....	1	.....	1	.....	1	.....
	31.....	13 28 25	52 26 40	1	.....	1	.....	1	.....	1	.....	1	.....
	31.....	12 47 30	52 57 52	1	.....	1	.....	1	.....	1	.....	1	.....
June	1.....	11 47 14	53 48 56	1	.....	1	.....	1	.....	1	.....	1	.....
	2.....	12 21 25	54 07 04	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
	2.....	12 21 24	54 29 21	1	.....	.....	.....	.....	.....	.....	.....	.....	.....
	2.....	12 20 17	54 48 55	1	.....	1	.....	1	.....	1	.....	1	.....
	2.....	12 21 54	55 09 24	1	.....	.....	.....	.....	.....	.....	.....	.....	.....
	2.....	12 48 42	55 01 18	1	.....	.....	.....	.....	.....	.....	.....	.....	.....
	3.....	13 19 29	54 56 59	1	.....	.....	.....	.....	.....	.....	.....	.....	.....
	3.....	13 40 17	54 53 53	1	.....	.....	.....	.....	.....	.....	.....	.....	.....
	3.....	14 14 08	54 45 45	1	.....	1	.....	1	.....	1	.....	1	.....
	4.....	15 25 07	55 01 23	1	.....	1	.....	1	.....	1	.....	1	.....
	5.....	15 53 39	56 45 39	1	.....	1	.....	1	.....	1	.....	1	.....
	6.....	16 43 22	58 05 59	1	.....	1	.....	1	.....	1	.....	1	.....
	6.....	16 43 22	58 54 34	1	.....	1	.....	1	.....	1	.....	1	.....
	7.....	16 42 11	59 06 28	1	.....	1	.....	1	.....	1	.....	1	.....
	8.....	19 02 36	59 33 20	1	.....	1	.....	1	.....	1	.....	1	.....
	9.....	20 12 30	59 38 52	1	.....	.....	.....	.....	.....	.....	.....	.....	.....
	9.....	21 13 44	59 36 10	1	.....	.....	.....	1	.....	1	.....	1	.....

List of specimens of salt water at the surface, and at various depths—Continued.

Date.	Hour.	Latitude.	Longitude.	Surface.		10 fathoms.		80 fathoms.		200 fathoms.		345 fathoms.	
				No. of specimens.	Specific gravity.	No. of specimens.	Specific gravity.	No. of specimens.	Specific gravity.	No. of specimens.	Specific gravity.	No. of specimens.	Specific gravity.
June 1852.		North. "	West. "										
10.....	7½ a. m.....	22 38 59	59 26 09	1	.....	1	.....	1	.....	1	.....	.....	.....
10.....	5.25 p. m..	23 35 33	59 25 09	1	.....	1	.....	1	.....	1	.....	.....	.....
11.....	5 a. m.....	24 36 48	59 49 19	1	.....	1	.....	1	.....	1	.....	1	.....
11.....	m.....	25 11 21	59 59 43	1	.....	.....	.....	.....	.....	.....	.....	.....	.....
11.....	6 p. m.....	25 45 13	60 06 43	1	.....	.....	.....	.....	.....	1	.....	.....	.....
12.....	5½ a. m.....	26 32 21	60 06 51	1	.....	1	.....	.....	.....	1	.....	.....	.....
14.....	3½ p. m.....	24 11 08	61 43 31	1	.....	.....	.....	.....	.....	1	.....	1	.....
15.....	8½ a. m.....	24 27 20	62 55 14	1	.....	1	.....	1	.....	1	.....	1	.....
20.....	9 a. m.....	24 36 46	65 12 18	1	.....	1	.....	1	.....	1	.....	1	.....
21.....	0.40 p. m..	25 14 13	66 57 12	1	.....	1	.....	1	.....	1	.....	1	.....
22.....	3 p. m.....	26 32 38	67 33 07	1	.....	.....	.....	.....	.....	1	.....	.....	.....
23.....	4½ a. m.....	27 21 24	68 06 03	1	.....	1	.....	1	.....	1	.....	1	.....
24.....	8½ a. m.....	28 56 12	69 04 08	1	.....	1	.....	1	.....	1	.....	1	.....
25.....	5½ a. m.....	30 38 38	70 10 04	1	.....	.....	.....	.....	.....	.....	.....	1	.....
25.....	6 p. m.....	31 58 00	70 59 43	1	.....	.....	.....	.....	.....	.....	.....	1	.....
26.....	4 a. m.....	32 16 33	71 32 20	1	.....	.....	.....	.....	.....	.....	.....	1	.....
26.....	7.20 p. m..	33 22 55	72 31 14	1	.....	.....	.....	.....	.....	.....	.....	1	.....
27.....	4 a. m.....	34 02 52	73 06 38	1	.....	.....	.....	.....	.....	.....	.....	1	.....
27.....	11.20 a. m..	34 38 14	73 45 42	.....	.....	1	.....	1	.....	.....	.....	.....	.....
27.....	7½ p. m.....	35 24 31	73 41 18	1	.....	.....	.....	.....	.....	1	.....	.....	.....
27.....	12 p. m.....	35 47 45	73 39 54	1	.....	.....	.....	.....	.....	1	.....	.....	.....
28.....	4½ p. m.....	36 04 21	73 59 00	.....	.....	1	.....	1	.....	.....	.....	1	.....

June 17, 1852, 5½ p. m., latitude 24° 33' 46", longitude 65° 31' 58", a specimen of water at 1,000 fathoms,

LIST OF SPECIMENS OF BOTTOM, &c.

United States surveying brig Dolphin, Lieutenant Commanding Samuel Phillips Lee—1851-'52.

Date.	No. of specimens.	Latitude.		Longitude.		Depth.	Character of bottom.	Remarks.
1852.		South.		West.		Fathoms.		
March 1	1	0 7 59	0 34 24	5 46	5	45	Coral rock.....	Off Pernambuco.....
24	1	3 52	33 42	30 0	0	16	Coral.....	Six miles east of the Rocas (Black rock).....
April 21	1	1 14	48 26	15 15	15	4	Blue mud.....	San Antonio bay, Para river.....
22	1	0 37	48 3	30 10	10	8	....do.....	Taipu bay, Para river.....
23	1	North.				8	Fine sand and mud.....	Mouth of Para river, 10 miles north of Monjui bank.....
24	1	0 5	48 7	11 20	4	11	Blue mud.....	At anchorage off mouth of Para river.....
25	1	0 13	48 11	10 4	29	9	....do.....	Off mouth of the Amazon.....
	1	0 27	46 51	56 29	24	24	Sand and fine gravel.....	
	1	0 32	46 41	11 34	23	23	Coarse sand and fine gravel.....	
	1	0 34	46 18	4 31	27	27	Grey sand.....	
	1	0 20	46 18	58 31	33	33	Fine grey sand.....	
	1	0 29	45 58	58 33	33	33	Grey sand.....	
26	1	0 19	45 43	5 36	46	43	Coral.....	
	1	0 1	46 17	29 46				
May 12	1	South.				8	Blue mud.....	Anchorage off Caens, near Para city.....
14	1	1 23	48 27	10 30	6½	6½	Dark blue mud.....	Bay do Correio, Para river.....
15	1	0 45	48 11	50 25	8½	8½	Dark mud.....	Off Taipu point, Para river.....

LIST OF SPECIMENS OF BOTTOM, &c.—Continued.

Date.	No. of specimens.	Latitude.	Longitude.	Depth.	Character of bottom.	Remarks.
1852.		Nor'h.	Wes	Fathoms.		
16	1	1 39 10	48 57 29	7½	Dark blue mud.....	
19	1	1 50 00	48 39 31	9½	Yellowish mud.....	
	1	2 36 52	47 45 2	58	Coral.....	
1851.		Nor'h.				
Dec. 2	1	23 15 00	32 45 0			Barnacles from a bottle picked up near Gombaude's vigia.....
1852.						
June 7	1	16 42 11	59 6 28			Small fish which jumped into the boat whilst making a deep sea sounding.....
April 20	1	South.				
		1 25 00	48 27 10			Sediment deposited by one bucketful of water from Para river, near city, after being left to settle 48 hours; tide last of flood, marked 1.....
21	1	1 25 00	48 27 10			Another as above, taken on last of ebb, marked 2.....
	1	1 14 15	48 26 15			Sand from beach of Para river, San Antonio bay.....

POINTS OF PRACTICE ON BOARD THE DOLPHIN.

Memorandum for Lieutenant O. H. Berryman, United States Navy, (my successor in the command of the United States surveying brig Dolphin,) forwarded through Commodore Morris, Chief of Bureau of Ordnance and Hydrography, August 31st, 1852.

OBSERVATIONS.

One of the other officers always observed with the master. Each worked out and sent in the result of his own observations. Recorded all original observations for latitude, time, and variation, and the results thereof, and made a smooth record of the same. A clever marine kept this record, (which was verified by the respective observers and computers,) and marked time for the observers who observed together. Recorded the index error at each set of observations, and the dip due to the part of the vessel from which they were made, also the name of the object, observer, marker, and computer, the character of the observation, whether good or otherwise, and, when not good, from what cause or causes. Tacked, lowered sail, &c., when necessary to get observations. The steering binnacle was amidships, (aft,) from which spot all variation observations were made, and "Gilbert's prismatic azimuth compass," the local deviation of which had been ascertained by swinging the vessel, was mounted on another well secured binnacle directly over it. Recorded the mean point on which the vessel headed whilst making variation observations.

The twilight observations of Polaris were taken when both the object and the horizon were distinct. Other twilight observations, as near the same period of distinct visibility as practicable.

When astronomical observations are made, the time, latitude, and longitude should be carefully recorded. It would be well to have a separate record book of day's works, on which should be noted all the allowances, variation, current, &c., used daily.*

COMPARISONS.

Wound all the chronometers and compared them with the standard at 10 a. m., daily. Let each observer compare for himself the hack watch with the standard chronometer. Recorded all comparisons, and by whom made.

Log.

Used the patent, recorded its index and the run by it when the course was changed, and when astronomical observations were made ; also,

* [Such a complete record of the observations, reckoning, and results used, should be kept on board public and private vessels, and would expose the cause of many shipwrecks, ensure safe navigation, confirm or refute reports of dangerous reefs and shoals, and of unusual currents, &c. It would be a great advantage to have bound volumes of convenient forms for the observations and computations made.]

hourly, when full and by, and at the end of each watch when going free. In another column made proportional allowance for lost interval whilst the log was out of water. Whilst taking temperature observations, with all sails furled and yards square, took in patent log, which will not work truly when going less than two knots, and to prevent its getting jammed by the rudder. On such occasions got the rate or set by using a log line made of small fishing line, and marked to tenths by little painted pine corks, which was entered in another column of the log. These allowances were used in making up the reckoning. When going fast, the patent log requires fifty or sixty fathoms of line over the stern, to prevent its jumping out of water. The patent log should not be allowed to touch the bottom lest sand should get into the works. The light surface line was marked with black corks on the stray line, white cork at every other tenth, and red cork at every knot.

CURRENTS.

Currents were found by comparing the run from noon to noon with the observed latitude of the sun, and the mean position for longitude at each noon derived from the mean of a. m. and p. m. sun sights of that day reduced to noon by log. The run was also compared for the same purpose with good a. m. and p. m. twilight and other observations. In calm and light weather and smooth water the boat was lowered, and anchored with a 32-lb shot attached to the small sounding line, or rode to the shot and about 1,000 fathoms of triple size line, and when the boat had steadied thereto the light surface log before described was hove several times for surface current. This 1,000 fathoms line was reeled up after the observation was made. The under current was also tried at 10 and at 80 fathoms, using a well-leaded, foot-square, white-painted pine block, suspended to canvas bags wet and blown up. A strong suspension cord and log line, with suitable stray line to it, were used for the last. The direction and rate and the boat's head were reported in writing by the officer of the boat and recorded in the log.

DEEP SEA SOUNDINGS.

Used small fishing line, as per sample, smoothed with wax, and marked to each 100 fathoms with a small piece of colored bunting, just large enough to be seen when running, attached to a 32-lb condemned shot;—(a long and pointed lead would sink better.)

The first 300 fathoms of this line was doubled, and in some cases the first 100 was tripled. Marked the time of letting go the shot and the time at which each 100 fathom mark passed out, and carried the interval into another column.

The line ran through a small bull's eye, held in one hand by a quartermaster, who gave line with the other hand when necessary to relieve the shot from the resistance of the reel.

The reel was mounted on a braced stand just forward of the stern sheets of the boat, and turned on friction rollers. Whilst the line was running out some oars were pulled just so much as to keep the line plumb, the boat being kept by the stern oar heading to wind, &c.

Date.		North.		South.	
February	21 9 a. m.	0 34 30	23 40 13	1	1
	22 9 a. m.	2 37 39	23 37 59	1	1
	23 9 1/2 a. m.	4 06 18	24 46 45	1	1
	24 9 a. m.	5 42 00	25 40 30	1	1
	25 9 1/2 a. m.	6 59 42	25 42 54	1	1
	27 9 1/2 a. m.	4 11 34	24 00 31	1	1
	29 9 1/2 a. m.	3 33 28	22 38 27	1	1
	30 3 1/2 p. m.	2 47 00	20 54 00	1	1
	31 7 a. m.	2 26 08	20 47 36	1	1
	2 9 1/2 a. m.	1 09 30	19 28 42	1	1
	3 1 p. m.	0 18 05	18 40 36	1	1
	4 2 1/2 p. m.	0 15 55	18 51 00	1	1
	5 3.20 p. m.	0 45 01	18 28 40	1	1
	8 4.20 p. m.	2 08 45	16 12 07	1	1
	9 10 a. m.	2 17 34	15 45 00	1	1
	11 6 1/2 a. m.	1 56 43	14 53 12	1	1
March	13 3 p. m.	0 31 52	17 45 23	1	1
	16 3 p. m.	0 22 50	21 06 32	1	1
	18 9 1/2 a. m.	1 02 13	23 17 45	1	1
	19 4 p. m.	1 50 30	24 52 06	1	1
	21 10 a. m.	3 15 06	29 03 34	1	1
	22 2 1/2 p. m.	3 47 54	31 45 24	1	1
	28 3 1/2 p. m.	4 35 22	32 43 35	1	1
	29 5 1/2 a. m.	5 32 01	32 43 52	1	1
	1 6 a. m.	7 37 34	33 55 52	1	1
	9 5.40 a. m.	6 15 26	33 24 10	1	1
	13 m.	3 51 41	33 02 14	1	1
	28 3 p. m.	4 19 55	34 45 40	1	1
	30 6 a. m.	4 26 21	35 09 06	1	1
	31 6 a. m.	4 24 18	35 23 21	1	1
April	1 3 p. m.	3 18 06	35 44 58	1	1
	2 6 a. m.	2 32 50	36 36 20	1	1
	3 5 1/2 a. m.	2 21 44	36 35 51	1	1

ERRATA.

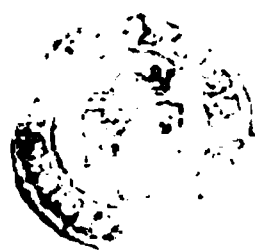
- Fig 39, Deep-sea sounding, first cast, instead of 1600 fathoms, read 1160 fathoms.
- 41, Deep-sea sounding, first trial, at 1500 fathoms, instead of 6h. 48m. 18s., read 6h. 48m. 08s.
- 84, Instead of "centre of reef east of *our* position by our survey," read "centre of reef east of *above* position by our survey."
- 90, April 8, first line, instead of 9h. 20m. a. m., read 9h. 10m. a. m.
- 105, June 8, line 5, instead of "*unwaxed* line," read "*waxed* line."
- 106, June 9, boat sounding, instead of latitude $21^{\circ} 13' 44''$, read $21^{\circ} 13' 44''$.
- 115, Instead of "bound from New York to the Cape Verde Islands," read "on a surveying cruise in the North and South Atlantic."
- 123, November 16, 4 a. m., barometer, instead of 59.99, read 29.99.
- 127, November 30, noon, instead of no sounding, read *bottom* at 2200 fathoms.
- 129, December 7, 4 p. m., barometer, instead of 29.25, read 29.95.
- 131, December 17, 0h. 30m. p. m., temperature water, under surface, instead of 100 fathoms, read 200 fathoms.
- 152, March 22, 3 p. m., under currents, instead of 10 fathoms, *twice*, the depths should be 10 and 80 fathoms.
- 154, March 29, 6 a. m., insert variation $9^{\circ} 49' W$.
- 160, April 28, 4 a. m., instead of longitude $44^{\circ} 42' 15''$, read $44^{\circ} 12' 15''$.
- 162, April 29, 5h. 30m. a. m., under currents, depths, instead of 10 and 30 fathoms, read 10 and 80 fathoms.
- 169, June 2, 2h. 45m. p. m., barometer, instead of 39.02, read 30.02.
- 171, June 7, 4h. 10m. p. m., temperatures under surface, instead of 75° at 300 fathoms, read 75° at 200 fathoms.
- 186, table, instead of "real strength," read "least strength,"
- 204, February 15, 1852, at 1200 and 1300 fathoms, instead of 3m. 39s.—3m. 29s., read 3m. 29s.—3m. 39s.
- 211, November 24, 1851, at 1700 fathoms, instead of 3m. 35s., read 3m. 25s.
- 221, February 2, sunset, for $18^{\circ} 42'$, read $18^{\circ} 22'$, westerly variation.
- 221, February 3, mean variation, instead of $17^{\circ} 00'$, read $17^{\circ} 09'$.
- 233, October 16, instead of latitude $36^{\circ} 43'$, read $37^{\circ} 43'$.
- 237, October 26, 12 p. m., air, instead of 74° , read 72° .
- 238, October 30, 10 p. m., air, instead of 60° , read 69° .
- 240, November 6, 12 p. m., air, instead of 74° , read 71° .
- 241, November 8, 9 p. m., water, instead of 75° , read 73° .
- 257, January 8, 10, 11, 12, a. m., air, instead of 73° , 73° , 73° , read 83° , 83° , 83° .
- 260, January 15, 12 p. m., water, instead of 89° , read 80° .
- 261, January 19, 11 p. m., air, instead of 70° , read 79° .
- 269, February 11, 1, 2, 3, p. m., air, instead of 82° , 82° , 82° , read 88° , 88° , 87° .
- 318, 319, temperatures, instead of number of casts, read number of observations.
- 327, April 26, latitude, instead of $0^{\circ} 1' 29''$, read $1^{\circ} 1' 29''$.

ERRATA ON GENERAL TRACK CHART.

- November 20, 4 p. m., temperature, at 200 fathoms, instead of 52° , read 59° .
- 229, variation, instead of $2^{\circ} W$., read $2\frac{1}{2}^{\circ} W$.



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GOMBAUD'S ROCK.

Track of the U.S. Surveying Brig Dolphin
Lieut Samuel Phillips Lee, commanding
Decr 1st to 2nd 1851

A Assigned position

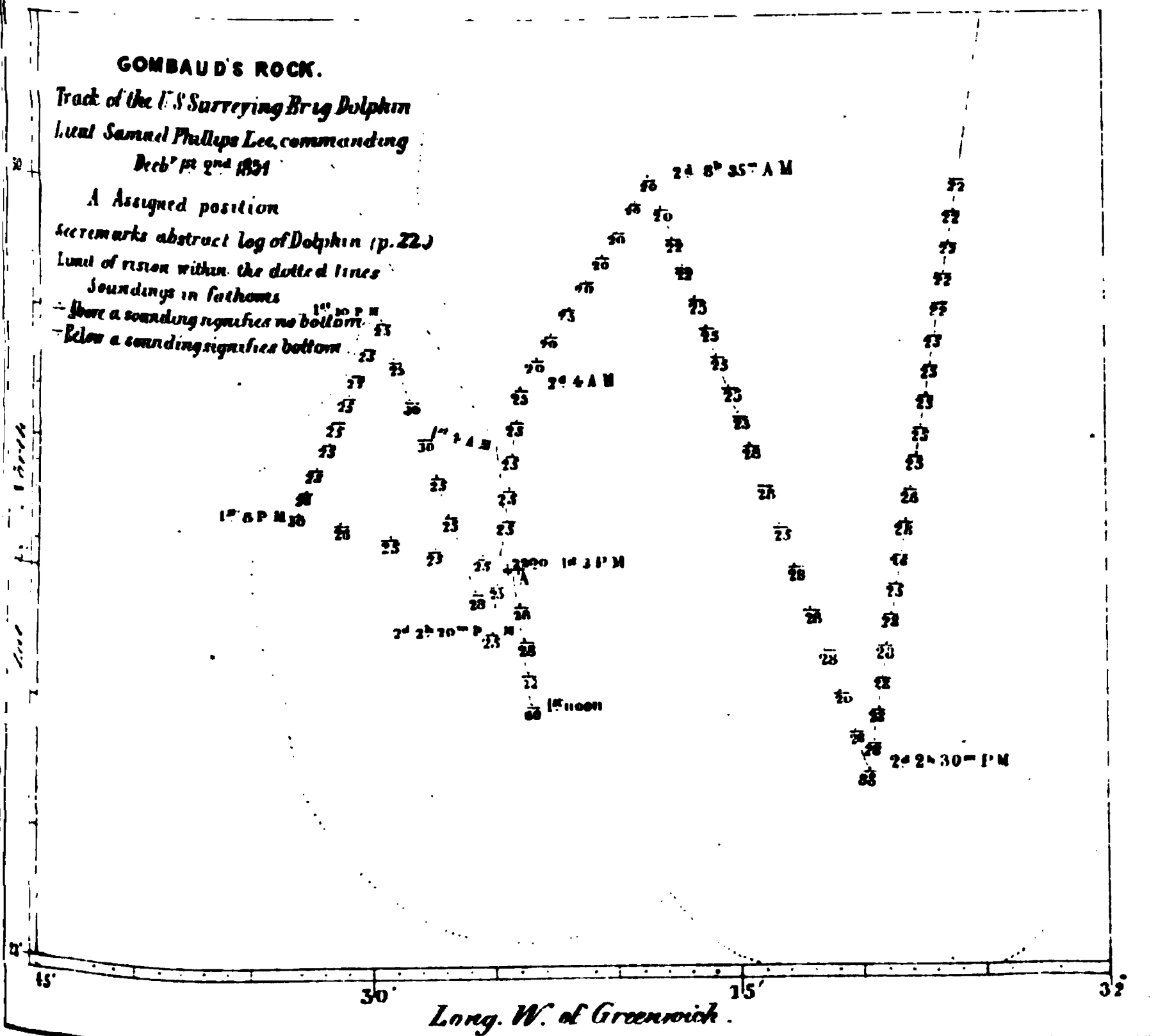
See remarks abstract log of Dolphin (p. 22.)

Limit of vision within the dotted lines

Soundings in fathoms

— Above a sounding signifies no bottom

— Below a sounding signifies bottom



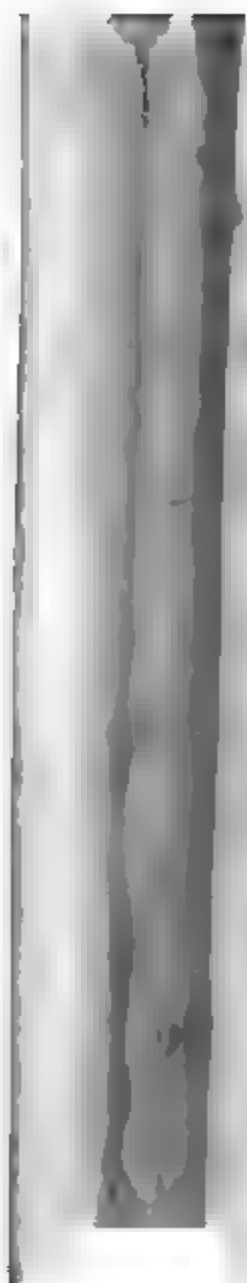






NOTICE.

The abstract of daily results given in tabular form, beginning at
ge 115, should be referred to in reading the abstract remarks of
ch day given on the preceding pages.



MESSAGE

FROM

THE PRESIDENT OF THE UNITED STATES,

COMMUNICATING

The report of an investigation of the charges of fraud and misconduct in office, alleged against Alexander Ramsey, superintendent of Indian affairs in Minnesota.

JANUARY 10, 1854.—Read and referred to the Committee on Indian Affairs.

JULY 28, 1854.—Ordered to be printed.

To the Senate of the United States:

I herewith communicate to the Senate a letter from the Secretary of the Interior, accompanied by a report of the result of an investigation of the charge of fraud and misconduct in office, alleged against Alexander Ramsey, superintendent of Indian affairs in Minnesota, which I have caused to be made, in compliance with the Senate's resolution of the 5th of April last.

FRANK. PIERCE.

WASHINGTON CITY, January 9, 1854.

DEPARTMENT OF THE INTERIOR,
Washington, January 9, 1854.

SIR: I have the honor to transmit to you herewith a letter from the Commissioner of Indian Affairs, dated the 5th instant, accompanied by the report of Richard M. Young, the agent appointed by you in compliance with the resolution of the Senate of the 5th of April last, to investigate the charges of fraud and misconduct in office, alleged against Alexander Ramsey, superintendent of Indian affairs in Minnesota.

As the Senate resolution of April last merely requested the President to cause the investigation to be made, and to report the result to the Senate, and as no appropriation was made to defray the expenses incident thereto, I also transmit the accounts which have been presented, in order that the Senate may make provision for their payment.

I am, sir, very respectfully, your obedient servant,

R. McCLELLAND,
Secretary.

To the PRESIDENT.

DEPARTMENT OF THE INTERIOR,
Office Indian Affairs, January 5, 1854.

SIR: I have the honor herewith to transmit the report of Willis A. Gorman and Richard M. Young, commissioners appointed by the President, in pursuance of the resolution of the Senate of the United States of the 5th of April, 1853, to investigate the charges of fraud and misconduct in office, alleged against Alexander Ramsey, late superintendent of Indian affairs in Minnesota Territory, and which were referred to the Committee on Indian Affairs, by resolution of the Senate of the 10th of January, 1853.

This report is signed by Commissioner Young, and was submitted by him to this office on the 30th ultimo. Accompanying it will be found copies of the exhibits and testimony in relation to the charges, and the copies of original papers in the case, which were furnished to the commissioners from this office, for the purposes of the investigation.

Very respectfully, your obedient servant,

GEO. W. MANYPENNY,
Commissioner.

Hon. R. McCLELLAND,
Secretary of the Interior.

REPORT
OF
THE COMMISSIONERS,

APPOINTED

By the President of the United States, to investigate the official conduct of Alexander H. Ramsey, late governor of Minnesota Territory, with the testimony taken in the case by them, transmitted to the Senate with the message of the President of the United States, January 10, 1854.

MAY 8, 1854.—Ordered to be printed.

WASHINGTON CITY,
December 20, 1853.

SIR: We, the undersigned commissioners, specially appointed by the President to investigate the charges preferred against the Hon. Alexander Ramsey, late Superintendent of Indian Affairs of Minnesota Territory, by Madison Sweetser and Daniel A. Robertson, esquires, have, in pursuance of the resolution of the Senate of the United States of the 5th of April, 1853, and our instructions from the Department of the Interior, made said investigation, by the examination of the documents submitted to us and of witnesses duly sworn, as well on the part of Governor Ramsey as the United States, at the office of the executive in the capitol at St. Paul, Minnesota Territory, from time to time from the 6th day of July, to the 7th day of October, 1853, both days inclusive, and respectfully submit, for the information of the Senate, the following report, to wit:

That it is provided by the first clause of the fourth article of the treaty made with the See-see-toan, and Wah-pay-toan bands of Dakota or Sioux Indians on the 23d of July, 1851, "that there shall be paid to the chiefs of the said bands, to enable them to settle their affairs and comply with their present just engagements, and in consideration of their removing themselves to the country set apart to them as above, which they agree to do within two years or sooner, if required by the President, without further cost or expense to the United States, and in consideration of their subsisting themselves the first year after their removal, which they agree to do without further cost or expense on the part of the United States, the sum of \$275,000: *Provided*, That said sum shall be paid to the chiefs in such manner as they hereafter in *open council* shall request, and as soon after the removal of said Indians to the home set apart for them as the necessary appropriation therefor shall be made by Congress."

And by the first clause of the fourth article of the treaty made with.

the Med-a-wakan-toan and Wah-pa-koo-ta bands of Dakota or Sioux Indians on the 5th of August, 1851, as follows :

“ To the chiefs of the said bands, to enable them to settle their affairs and comply with their present just engagements, and in consideration of their removing themselves to the country set apart for them as above, (which they agree to do within one year after the ratification of this treaty, without further cost or expense to the United States,) and in consideration of their subsisting themselves the first year after their removal, (which they agree to do without further cost or expense on the part of the United States,) the sum of \$220,000 : *Provided*, That said sum shall be paid one-half to the chiefs of the Mad-a-wakan-toan band and one-half to the chief and headmen of the Wah-pay-koo-ta band, in such manner as they hereafter in *open council* shall respectively request, and as soon after the removal of said Indians to the home set apart for them as the necessary appropriations therefor shall be made by Congress.”

These treaty stipulations were respectively ratified by the Senate of the United States, with certain amendments, on the 23d of June, 1852; the admendments agreed to by the chiefs and headmen of the See-see-toan and Wah-pay-toan bands of Indians on the 8th day of September, 1852, by the chiefs and headmen of the Med-a-wakan-toan and Wah-pay-koo-tay bands, on the 4th of September, 1852, and confirmed, ratified and published by the President of the United States on the 24th of February, 1853.

The appropriations made by the first section of the act of Congress of August 30, 1852, for fulfilling treaty stipulations with the Sioux Indians under the treaties of July 23, and August 5, 1851, are in the following words, to wit :

“ For payment of the chiefs of the See-see-toan and Wah-pay-toan bands of Dakota or Sioux Indians, to enable them to settle their affairs and to comply with their present just engagements, for expenses of removal of the said bands from the lands ceded, and for subsistence of themselves for one year thereafter, per *first* clause of the *fourth* article of the treaty of the 23d of July, 1851, ratified by the Senate of the United States, June 23, 1852, \$275,000.”

And “ for payment to the chiefs of the Med-a-wakan-toan and Wah-pay-koo-ta bands of Dakota or Sioux Indians, to enable them to settle their affairs and comply with their present just engagements ; for expenses of removal of said Indians from the lands ceded, and for subsistence for themselves for one year thereafter, per *first* clause of the *fourth* article of the treaty of the 5th of August, 1851, ratified by the Senate of the United States, June 23, 1852, \$220,000. *Provided*, That no portion of the money appropriated for the purpose aforesaid shall be applied until said Indians shall express their assent to the treaty as amended by the Senate.” The third section of the same act provides as follows: Section third, “ That no part of the appropriations herein made, or that may hereafter be made, for the benefit of any Indian, or tribe, or part of a tribe of Indians, shall be paid to any attorney, or agent of such Indians or tribe, or part of a tribe, but shall in every case be paid directly to the Indian or Indians themselves to whom it shall be due, or to the tribe or part of a tribe *per capita*, unless

the imperious interest of the Indian or Indians, or some treaty stipulations shall require the payment to be made otherwise, under the direction of the President; nor shall the executive branch of the government now or hereafter recognize any contract between any Indian or tribe, or part of a tribe, or any attorney or agent for the prosecution of any claim against the government under this act."

See Little & Brown's pamphlets, Laws United States of 1851 and 1852, pages 51, 52, and 56. To enable Governor Ramsey, as superintendent of Indian affairs of the Minnesota Territory, to comply with the treaty stipulations referred to on the part the United States, and to provide for the payment of the first year's *annuities* under the new treaties of July 23 and August 5, 1851, as aforesaid, a requisition was made in his favor on the treasury of the United States, on the 4th day of October, 1852, for the sum of \$593,050, to be disbursed as directed by the following letter from the Commissioner of Indian Affairs, to wit:

DEPARTMENT OF THE INTERIOR,
Office Indian Affairs, October 4, 1852.

SIR: A requisition has this day issued in your favor for the sum of \$593,050, with which you will be charged and held accountable under the recent appropriation for fulfilling treaties with the Sioux of the Mississippi, to wit:

For payment of the chiefs, per first clause, fourth article, treaty 23d July, 1851.....	\$275,000
For payment of the chiefs, per first clause, fourth article, treaty 5th of August, 1851.....	220,000
For this amount, to be laid out under the direction of the President, &c., per second clause, fourth article, treaty 23d July, 1851.....	5,000
For this amount, to be laid out under the direction of the President, &c., per second clause, fourth article, treaty 5th of August, 1851.....	5,000
For interest, per fourth article, treaty 23d July, 1851, (for provisions. \$4,000).....	44,000
For interest, per Senate's amendment, treaty 23d of July, 1851.....	5,600
For interest, per fourth article, treaty 5th August, 1851, (for provisions \$5,000).....	35,000
For interest, per Senate's amendment, treaty 5th of August, 1851.....	3,450
	<hr/>
	593,050
	<hr/>

Familiar as you are with the provisions of these treaties, it is unnecessary to give you detailed instructions in regard to the funds now placed in your hands. Had the treaties been ratified as originally made, the removal of the Indians to the reservations provided for them, would have been required as a condition precedent to the payment of said funds; but the delay occasioned by the amendments of the Senate, and the consequently suffering condition of the Indians in connexion with

other interests involved, may render it expedient to dispense in some measure with this condition, and to pay out a portion of the funds in advance of the entire removal of the Indians.

You will be governed by a sound discretion in regard to this matter, taking care to provide effectually for their removal during the next year, and for their subsistence as contemplated by the treaties.

The subsistence and presents furnished the Indians while you were engaged in obtaining their assent to the amendments of the Senate may, as you suggest, be paid out of the funds provided for their first year's subsistence.

To pay for clerical services and other incidental expenses necessarily incurred by you in procuring the assent of the Indians to the amendments of the Senate, a remittance will be immediately made to you of \$250, for which you will account under the head of "contingencies of Indian Department."

Very respectfully, your obedient servant,

L. LEA, *Commissioner.*

On the 5th of October, 1852, a draft, No. 3808, was drawn at the Treasury Department of the United States in favor of Alexander Ramsey, as superintendent of Indian affairs, on the assistant treasurer of New York, for the sum of \$593,050, embracing the several amounts mentioned in the letter of the Commissioner of Indian Affairs of October 4, 1852, as aforesaid; which was disbursed and appropriated by Governor Ramsey as hereinafter mentioned and explained in this report. And thereupon Madison Sweetser, esquire, as attorney for the Indians addressed a communication to the Hon. William K. Sebastian, chairman of the Committee on Indian Affairs of the Senate of the United States, dated at Washington city, February 26, 1853, in which he submits for investigation the following charges and specifications against the official conduct of the Hon. Alexander Ramsay as superintendent of Indian affairs of Minnesota Territory, for not having made his disbursements of the said sums of money in the manner and for the purposes mentioned in the said first clauses of the fourth articles of the treaties of the 23d of July, and 5th of August, 1851, in the following respects, to wit:

Charge 1st. With confederating with Henry H. Sibley, Hercules L. Dousman, Hugh Tyler, Franklin Steele, and others, to absorb the whole fund named, to favorites, to the exclusion of meritorious creditors, in violation of law, and the universal practice of the government in the liquidation of the indebtedness of Indians to their creditors.

Charge 2d. With having received from the government \$593,050, in the national currency of the United States, under instructions from the proper department, to be paid to the Dakota Sioux, in accordance with their treaty stipulations, and with having exchanged the national currency thus obtained before leaving the eastern cities for bank paper and drafts. Of having paid the bank paper and drafts upon government contracts, and with returning the receipts therefor to the department for settlement of his accounts.

Charge 3d. With having violated the treaties with the Da-ko-ta Indians, in refusing payment to them, although often and urgently demanded in accordance with their treaty stipulations; with having unlawfully paid said money into the hands of one Hugh Tyler, who divided it among a few claimants at the house or trading post of Henry H. Sibley; the wishes and rights of the Indians having been totally disregarded in violation of law, and the express stipulations of their treaties.

Charge 4th. With having, in connexion with Henry M. Rice and others, assembled the upper Sioux at Traverse des Sioux, and there attempting to procure from the Indians written authority to control their money arising under the treaties.

Charge 5th. With having attempted to obtain from the treasury of the United States the money due to the Sioux Indians upon a power of attorney, which he admitted to be void, and which he obtained from the Indians by fraud.

Charge 6th. With having used cruel and oppressive conduct towards the chiefs, who were the authorized agents of said bands, and with having substituted unauthorized persons as chiefs and braves, and the procurement of receipts from such persons which he is now attempting to palm off upon the government as vouchers in the settlement of his accounts with the Indian Bureau.

Charge 7th. With improper conduct in not holding his councils with the Med-a-wakan-toan Indians at the council house of the government, and with holding the same at the trading house of persons with whom he was confederating, to overreach them by menace and other influences, which enabled him to effect his purposes aforesaid; that said chiefs were kept drunk by the use of intoxicating liquors during said councils.

Charge 8th. With having openly violated the treaty, in not reserving a sufficient amount out of the See-see-toan and Wah-pa-toan funds to remove and subsist them for one year.

Charge 9th. With having paid nearly the entire trust fund of said Indians, amounting to near \$450,000, at the trading house of Henry H. Sibley, and that but a few, if any, were benefitted by said payment but those who now are or have been connected with said company in trade, and with whom he was confederating. That there are many other meritorious creditors of the Indians who were thrust aside, and were not permitted to share in the distribution.

M. SWEETSER,

Attorney for the Indians.

His Excellency ALEXANDER RAMSEY,

Governor, &c., Washington, D. C.

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The following are the specifications made by M. Sweetser, to wit:

1st. That of the \$593,050, paid by the government to Alexander Ramsey as superintendent of Indian affairs, not exceeding \$80,000 or \$100,000, was taken to the Minnesota Territory in gold or silver—the

balance having been exchanged in New York and Pennsylvania for paper money and drafts.

2d. That he paid government contractors in Minnesota Territory with paper money and drafts, and large sums of paper money to the half-breed Indians.

3d. That he refused to pay to the chiefs of the Da-ko-ta Indians according to the provisions of the fourth articles of their treaty stipulations of July and August, 1851.

4th. That near a third of a million of dollars was paid by him to Henry H. Sibley, Hercules L. Dousman, Doctor Charles W. Brown, Franklin Steele, Joseph R. Brown and others, upon a fraudulent contract obtained from these Indians at the same time the treaty was signed, and that Hugh Tyler was made the medium of this payment, for which fifteen per cent was charged to both half breeds and others.

5th. That the money was paid in violation of the treaty, in violation of the act of Congress appropriating the same, against the often repeated wishes of the Indians, and against their solemn protests.

6th. That the Indians repeatedly, in *open council*, demanded the money under the treaties, but were refused by the governor.

7th. That his vouchers now on file in the Indian Department for the settlement of his accounts are frauds upon the Indians. That the receipts of the See-see-toan and Wah-pa-toan chiefs, as presented by him, are not the receipts of their principal chiefs, but with two exceptions are signatures of young men, not recognized by the nation, and possessing no authority from them to act.

8th. That the receipt of the Wah-pa-toan chiefs is equally a fraud and obtained from them illegally, and against their wishes.

9th. That in all his official intercourse with the tribes for the past year he has manifested a predetermined and fixed purpose to avoid the payment of this large sum to the Indians.

The council held at Traverse des Sioux in July last, (1852,) establishes this fact beyond doubt.

10th. That the disbursement of this large sum is not a payment to the Indians, their wishes having been totally disregarded, and the law and treaty in no particular complied with.

M. SWEETSER.

The following are the charges preferred against the Hon. Alexander Ramsey as superintendent of Indian affairs of Minnesota Territory, by Daniel A. Robertson, esquire, to wit:

1st. That said Alexander Ramsey exchanged a large portion of the gold received by him to pay the Da-ko-ta Indians, as stipulated under the late treaty, for bank notes, in violation of law.

2d. That he deposited a large portion of said gold in banks, in violation of law.

3d. That he paid contractors for supplies for said Da-ko-ta Indians in bank notes, in violation of law.

4th. That he refused to pay the said Da-ko-ta Indians the amount due to them under the treaties aforesaid, but by force and intimidation

attempted to compel them to consent to such a disposition of said money as he desired; and by his conduct in this regard treated them with injustice and cruelty, and in violation of law, the treaty stipulations, and his own solemn pledges previously made to said Indians.

5th. That the said Ramsey, with Henry H. Sibley, Doctor Charles W. Borup, Joseph R. Brown, Charles D. Fillmore and others, have co-operated to deprive the Da-ko-ta Indians of their rights under the late treaties; and that by their machinations, the money due to the said Indians was disbursed in violation of law, the rights of the Indians, and treaty stipulations.

6th. That one Hugh Tyler was employed by the parties to this violation of law, and treaty stipulations, as the visible go-between, borer, or agent, and that a large per centage was agreed to be paid, or left in his hands as a fee from the fraudulent recipients of the Da-ko-ta money.

7th. That in consummation of the frauds above alleged, Alexander Ramsey paid a large amount of moneys due to the said Da-ko-ta Indians by treaty, and by him received to pay to them, to the said Hugh Tyler, who paid it chiefly to traders connected with the fur company of Pierre Choteau and others; which proceeding was in violation of law and treaty stipulations.

DANIEL A. ROBERTSON.

Sworn to and subscribed, March 19, 1853.

W. F. WALLACE,

Clerk to the committee, U. S. Senate.

The following statement and explanation made by Governor Ramsey to the Hon. Luke Lea, Commissioner of Indian Affairs, will show the manner in which the \$275,000, appropriated to carry out the stipulations under the first clause of the fourth article of the treaty of the 23d of July, 1851, and the \$220,000 under the first clause of the fourth article of the treaty of the 5th of August, 1851, were disbursed by him as superintendent of Indian affairs, &c. &c., to wit:

MINNESOTA SUPERINTENDENCY,
St. Paul, January 15, 1853.

SIR: I had the honor, some few days since, to transmit you my accounts and vouchers for the fourth quarter of the year 1852. As the principal disbursements in that quarter were on account of the recent Sioux treaties, and the sums were large, I deem it proper to place in the possession of your department a brief statement of my action in the premises.

The payment of \$250,000, part of the sum of \$275,000 appropriated in the first clause of the fourth article of the treaty of Traverse des Sioux, was made to the traders and half breed relatives of the See-see-toan and Wah-pa-toan Sioux, agreeably to the terms of a paper marked A, executed by the chiefs of these bands immediately subsequent to the aforesaid treaty. The balance, viz: \$25,000, I retained for the subsistence and removal of these Indians.

Much has been said of the character of that paper; but it has, to my knowledge, only been assailed when the Indians, notoriously false, were under the control of persons who had large pecuniary motives in invalidating it. From its face, and from information gathered from responsible persons, I am satisfied that it was as equitable a distribution of this money as could well have been effected, and that it was executed by the Indians with a full knowledge of what it meant.

Acting as the agent of these Indians, under an authorization of the chiefs (marked B.) of the 9th of September, 1852, I deemed it proper to place the fairness of the distribution effected as above beyond all doubt, and so required of the traders to verify their claims under oath. This was done, and the statement marked C contains a list of the traders, as drawn from paper A, with their accounts sworn to, from which it appears that \$210,000 paid \$431,735 78 of indebtedness. See voucher No. 4, abstract B, in my accounts for the fourth quarter of 1852.

These traders and half-breeds constituted Hugh Tyler their attorney, and requested me to pay to him the \$250,000 due them. A copy of this power of attorney, marked D, with Mr. Tyler's receipt, marked E, is enclosed herewith.

The Wahpakoota chief and headmen, parties to the treaty of Mendota, had, in open council, on the 8th day of August, 1852, afterwards acknowledged before agent McLean, distributed among their traders the sum of \$90,000, provided for in the first clause of the fourth article of the treaty of Mendota. A copy of this paper, with the authority, on the part of all interested, to Hon. H. H. Sibley to receive the money of me, and his receipt therefor, is transmitted herewith, marked F.

It is proper here to remark, that in a council I held with the chiefs, braves, &c., on the 8th day of November, 1852, they referred to the paper, and requested me to pay agreeably to its terms. The balance due this band, viz., \$20,000, I have retained for their removal and subsistence.

In this connexion, please see in my accounts for 4th quarter of 1852, voucher No. 1, abstract C.

The Med-a-wakan-toan chiefs instructed me on the 9th of November, 1852, to pay \$70,000 of the sum appropriated in the first clause of the fourth article, of the treaty of Mendota, in full discharge of their obligations to their licensed traders at the date of said treaty. (See my accounts for fourth quarter of 1852, voucher number 4, abstract C) Twenty thousand dollars they requested might be paid into their own hands, which they expressed a purpose to pay out to their half-breed relatives. A duplicate original of the receipt of the chiefs for this sum marked G, is made part of this communication.

A list of licensed traders, since the treaty made by the same people in 1837, when their then debts were paid, certified to by Philand Prescott, long the interpreter at the Sioux agency, marked H, is herewith enclosed. A power of attorney from these traders to Hugh Tyler, esq., authorizing him to receive of me the sum of \$70,000, in and apart as aforesaid, with his receipt therefor, is transmitted herewith marked I.

The claimants were directed to verify their accounts, under oath

This they did, and a tabular abstract of the accounts filed with me, and sworn to, is sent herewith, marked K, from which it will be seen that \$70,000 paid \$129,885 10 of indebtedness. The balance of the fund due this band, viz: \$20,000, has been retained by me for their removal and subsistence.

Finally, I believe I am justified in saying that the several large sums of money have been fairly, legally, and equitably disbursed; that the Indians are all satisfied; that every one having a claim against the Indians under the treaty of Traverse des Sioux has been provided for, as is likewise the case with all having claims against the Wah-pa-koota Indians, parties to the treaty of Mendota. All the *licensed* traders of the Med-a-wakan-toan Sioux have been paid.

Very respectfully, your obedient servant,

ALEXANDER RAMSEY.

Hon. L. LEA, *Commissioner, &c.*

EXHIBIT A,

(Called by the witnesses the "*Traders' Paper.*")

We, the undersigned chiefs, soldiers, and braves of the Wah-pa-toan and See-see-toan bands of Sioux Indians, having this day concluded a treaty with Luke Lea and Alexander Ramsey, commissioners on the part of the United States, whereby we have ceded to the United States certain lands for a valuable consideration, and being desirous to pay to our traders and half-breeds the sums of money which we acknowledge to be justly due to them, do hereby obligate and bind ourselves, as the authorized representatives of the aforesaid bands, to pay to the individuals hereinafter designated the sums of money set opposite to their respective names, so soon as the same shall be paid us in accordance with the fourth article of the treaty aforesaid, which provides for the payment of a certain sum to us as soon as practicable after our removal and the necessary appropriation shall be made by Congress for arranging our affairs preparatory to our removal to the country designated in said treaty for our future abode, and for other purposes; and as it is specified that said sum shall be paid in such manner as requested by the chiefs in open council thereafter, we do hereby, in open council, request and desire that the said sums below specified shall be paid to the persons designated as soon as practicable after the necessary appropriation shall be made by Congress for this purpose; and for this payment, well and truly to be made, we hereby solemnly pledge ourselves and the faith of our nation. And we do hereby release and acquit the United States, upon the payment of the sums aforesaid as herein specified, from any further liability to us or to our nation for so much of the amount so to be paid as is provided for in the fourth article of the treaty aforesaid.

Dated at Traverse des Sioux, in the Territory of Minnesota, this twenty-third day of July, A. D. eighteen hundred and fifty-one.

Sa-te-e-ta-ton, his x mark.

E-yang-mo-nee, his x mark.

E-tay-wah-ke-an, his x mark.
 Ish-tah-hum-bah, his x mark.
 Ya-zho-pee, his x mark.
 Wash-e-dia-moz-za, his x mark.
 Wash-te-dan, his x mark.
 Mag-ma-nee, his x mark.
 Ham-pa-red-ar-da, his x mark.
 In-te-pa, his x mark.
 Moch-pee-we-chas-ta, his x mark.
 Wa-kan-mo-nee, his x mark.
 I-te-xa-ke-ye, his x mark.
 Ta-ka-ra, his x mark.
 Mar-pi-na-kan-kan, his x mark.
 Wa-na-pe-ya, his x mark.
 Ta-pe-ta-tan-ka, his x mark.
 Wi-chas-kan-kan-mo-bee, his x mark.
 Ta-wan-kan-di-maz-za, his x mark.
 I-te-du-ta, his x mark.
 Cah-e-desh-ka-ho-ton-ma-nee, his x mark.
 Ho-nok-mar-pi-yah-di-nape, his x mark.
 Wa-kee-te ma-ni, his x mark.
 O-pe-li-de-yah, his x mark.
 Wah-nok-soon-ta, his x mark.
 Mah-zah-shah, his x mark.
 Wi-yu-ha, his x mark.
 Wa-ki-yan-tan-ka, his x mark.
 Ok-xi-dan-wash-te, his x mark.
 Ah-de-ma-za, his x mark.
 I-te-cho-ka, his x mark.
 Am-pe-tu-shaw, his x mark.
 Young-Sleepy-Eyes, his x mark.

Witnesses :

THOMAS S. WILLIAMSON,
 STEPHEN R. RIGGS,
 W. G. LADUC,
 A. S. H. WHITE,
 SAMUEL F. BROWN,
 H. JACKSON,
 JAMES McBOAL,
 THOMAS FOSTER,
 WM. C. HENDERSON.

*Schedule of amounts to be paid to the following individuals, as specified
the foregoing instrument, viz :*

Alexis Bailey and H. L. Dousman, fifteen thousand dollars.
 Norman W. Kittson, two thousand eight hundred and fifty dollars.
 Gabriel Rienville, six hundred and twenty-one dollars.
 Stephen R. Riggs and Thomas S. Williamson, missionaries for American Board of Missions for foreign missions, eight hundred dollars.

Philander Prescott, thirteen hundred and thirty-four dollars.

Franklin Steele, three thousand two hundred and fifty dollars.

Henry H. Sibley, sixty-six thousand four hundred and fifty-nine dollars.

Joseph R. Brown, six thousand five hundred and sixty-four dollars.

Joseph Provincalle, ten thousand and sixty-six dollars.

Joseph and Antoine Rienville, in trust for estate of late Joseph Rienville, seventeen thousand five hundred and forty dollars.

J. B. Farribault, twenty-two thousand five hundred dollars.

Alex. Farribault, thirteen thousand five hundred dollars.

Jos. Laframbois, eleven thousand three hundred dollars.

Xavier Fresnier, two thousand three hundred and fifty dollars.

Martin McLeod, nineteen thousand and forty-six dollars.

Louis Roberts, seven thousand four hundred and ninety dollars.

— Hartshorn, five hundred and thirty dollars.

Francis Labatte, five hundred dollars.

J. H. Lockwood, five hundred dollars.

Henry Jackson, three hundred dollars.

Hazen Moores, one thousand dollars.

Kenneth McKenzie, five thousand five hundred dollars.

Wm. H. Forbes, one thousand dollars.

Jas. Rienville, wife and children, two thousand two hundred and fifty dollars.

Antoine Rienville and three children, seven hundred and fifty dollars, and for self, two hundred and fifty dollars, in addition.

Michel Rienville, child and niece, seven hundred and fifty dollars.

Jos. Laframbois, for wife and five children, fifteen hundred dollars.

Jos. Laframbois, jr., two hundred and fifty dollars.

Francis Laframbois, two hundred and fifty dollars.

Francis Roy, four children and sister, fifteen hundred dollars.

Mary Anze and six children, seventeen hundred and fifty dollars.

Alex. Graham and child, five hundred dollars.

Joseph Provincalle and three children, one thousand dollars.

George Provincalle, two hundred and fifty dollars.

Mrs. Nancy Farribault, two hundred and fifty dollars.

Levi Bird, for his two children, five hundred dollars.

Mrs. Mary Ortlely McLeod and four children, twelve hundred and fifty dollars.

Angelique Rousseau, two hundred and fifty dollars.

Xavier Fresnier and four children, twelve hundred and fifty dollars.

Narcisse Fresnier and child, five hundred dollars.

Mrs. Mary Ballard and five children, fifteen hundred dollars.

Louis Bomcier, two hundred and fifty dollars.

Madame St. Antonie and five children, fifteen hundred dollars.

Madame Aug. Dupuis and five children, fifteen hundred dollars.

Baptiste Bonsquette, for child, two hundred and fifty dollars.

Jos. Renville, jr., two hundred and fifty dollars.

Margaret Campbell and two children, seven hundred and fifty dollars.

Jean B. Renville, two hundred and fifty dollars.

Rosalie Renville, two hundred and fifty dollars.

Isabella Fresnier, two hundred and fifty dollars.

Gabriel Renville and two children, seven hundred and fifty dollars.

Angelique Provincalle, two hundred and fifty dollars.

Thomas Provincalle, two hundred and fifty dollars.

Antoine Provincalle, two hundred and fifty dollars.

Francis Langie, for six children, fifteen hundred dollars.

Mrs. Harriet Farribault and four children, twelve hundred and fifty dollars.

Alex. Farribault, wife and eight children, two thousand two hundred and fifty dollars.

Louis Laramie, for four children, one thousand dollars.

Mrs. Agnes Forbes and two children, seven hundred and fifty dollars.

Mrs. Susan F. Brown and seven children, two thousand dollars.

Joseph Cousalle and two sisters, seven hundred and fifty dollars.

Francis Dumare, for five children, twelve hundred and fifty dollars.

Louis La Belle, for three children, seven hundred and fifty dollars.

Vital Boyer, for three children, seven hundred and fifty dollars.

Louis Martin, for eight children, two thousand dollars.

Mrs. Nancy McLeod, two hundred and fifty dollars.

Mrs. Angelique Quinn and child, five hundred dollars.

Jas. Robinette, jr., two hundred and fifty dollars.

Augustin Rock, two hundred and fifty dollars.

Francis Labatte, two hundred and fifty dollars.

Jas. R. Cluett, for two children, five hundred dollars.

Geo. F. Ortley, (Lac-qui-parle,) two hundred and fifty dollars.

Mrs. Antoine Findley, two hundred and fifty dollars.

TRAVERSE DES SIOUX, MINNESOTA TERRITORY,

July 23, 1851.

I hereby certify that this document, purporting to be an adjustment of the debts and accounts due by the Indians to the traders, was signed by the chiefs and braves whose names are attached, in my presence, immediately after the treaty was signed, in presence of all the Indians then and there assembled in council. It was not read and explained to them in my presence, but from the information of those understanding the Sioux language upon whom I can rely, who were present at a previous meeting of the Indians and traders, it was read and explained to them, and that they agreed to its correctness.

NATHANIEL McLEAN, *Indian Agent.*

I certify that the foregoing paper, desiring the payment by the Indians, parties to the treaty of Traverse des Sioux, of certain sums of money to their traders, &c., as well as the certificate thereto attached by agent McLean, both are true copies of the original paper and certificate in my possession.

ALEXANDER RAMSEY,
Superintendent, &c.

EXHIBIT B.

Power of attorney given by the See-see-toan and Wah-pa-toan chiefs of Sioux Indians to Governor Ramsey, to receive from the United States the \$275,000 due to them under the fourth article of the treaty of July 23, 1851.

Whereas, by the fourth article of the treaty made and concluded at Traverse des Sioux on the 23d day of July, 1851, between the United States, by Luke Lea, Commissioner of Indian Affairs, and Alexander Ramsey, governor and *ex officio* superintendent of Indian affairs, commissioners on the part of the United States, and the chiefs and headmen of the See-see-toan and Wah-pa-toan bands of Dakota or Sioux Indians, duly authorized thereto, it was, among other things, provided that the United States would pay to the chiefs of said bands, to enable them to settle their affairs and comply with their (then) present just engagements, and in consideration of their removing themselves to the country set apart for them by said treaty, and in consideration of their subsisting themselves the first year after their removal, which they agreed to do, without further cost to the government, the sum of two hundred and seventy-five thousand dollars, (\$275,000,) provided that the said sum should be paid to the said chiefs in such manner as they thereafter in open council should request :

And whereas the said treaty has been approved and ratified by the President and Senate of the United States, with certain amendments added thereto, which amendments have been this day submitted by Alexander Ramsey, governor and *ex officio* superintendent of Indian affairs, as aforesaid, acting for and on behalf of the United States, and we, the undersigned, chiefs of said bands, and duly authorized thereto, have in open council concurred in, consented, and agreed to said amendments :

Now, therefore, *we*, the said chiefs, being desirous that the provisions of the said treaty, and especially of the fourth article thereof, should be fully and fairly carried out, according to its just and true intent and spirit, and having full confidence in the discretion and integrity of his excellency Alexander Ramsey, governor and *ex officio* superintendent of Indian affairs as aforesaid, do, in open council assembled, by these presents authorize, empower, and request him to ask and receive for us, and in our names, the said sum of two hundred and seventy-five thousand dollars, (275,000,) hereby giving him full power to receipt for the same, and execute in our names all necessary vouchers and acquittances therefor; and we do hereby, in open council, authorize and request the proper officers of the United States to pay the said sum to him, the said Alexander Ramsey, &c., as aforesaid; and we also authorize, empower, and request him to do, or cause to be done, all the acts contemplated by the said fourth article for and by us to be done, to appropriate the said money in accordance with and for the purpose of carrying out the equitable and true intent thereof; all such acts when done to be final and binding upon us, and to have the same force and effect as if done by us.

And we do hereby revoke and annul all former and other powers

of attorney executed or given by us with reference to the receipt or collection of the said sum of money or any part thereof.

E-yang-mo-nee, his x mark.

E-tay-wah-ke-an, his x mark.

Ish-tah-hum-bah, by his nephew, his x mark

Mack-pee-we-chas-ta, his x mark.

Esh-ta-hom-ba-ko-ash-ka, his x mark.

O-pee-en-dah, his x mark.

No-aw-pa-keen-yan, his x mark.

Wash-tang-day, his x mark.

Ha-ya-he-day-ma-za, by his father, his x mark.

Wa-keen-ya-doo-tah, his x mark.

A-na-wang-ma-nee, his x mark.

Enk-fra, by his son, his x mark.

Ya-zoo-ah-pee, his x mark.

Ta-pe-ta-tunk-ka, his x mark.

Wa-mee-de-o-to-mo-nee, his x mark.

Wah-pe-yan-ha-skan-skan, his x mark.

No-hope-ton, his x mark.

Wo-to-ne-ho-wash-ta, his x mark.

Maz-a-ho-te-man-i, his x mark.

Ta-chan-ka-hoo-ta, his x mark.

Wah-pah-ha-na, his x mark.

Wah-ne-pe-de-doo-tah, his x mark.

Ho-pah-sho-ko-ma-za, his x mark.

Tah-wa-kan-he-da-ma-za, his x mark.

Wa-ka-han-de-to-pa, his x mark.

Wa-kan-dee-ka-ta, his x mark.

Mah-kah-en-day, his x mark.

Signed in open council this 8th day of September, 1852, in presence of—

NATHANIEL McLEAN, *Indian agent.*

WALLACE B. WHITE, *Secretary.*

PHILANDER PRESCOTT, *Interpreter.*

JOSEPH LAFRAMBOIS, *Interpreter.*

HENRY M. RICE.

I, Nathaniel McLean, United States Indian agent, do hereby certify that the foregoing named chiefs and headmen of the See-see-toan and Wah-pa-toan, bands of Dakota or Sioux Indians, now in full and open council assembled, and who constitute and are the proper authorities of said bands, being a majority of the chiefs and headmen, and as such fully competent to transact any and all tribal or national business, for and in behalf of said bands of See-see-toan and Wah-pay-toan Indians, authorize and request me as their agent, to state that the annexed and foregoing authority in writing from them, was signed and executed by them in good faith, and with a full and complete knowledge of its contents, purport, and meaning, and for the uses and purposes therein named; and the same having been by me fully explained, they, for themselves and their bands approve, ratify, and confirm the same,

and authorize and request me to bear written testimony that the same
 is their tribal and national act and deed.

NATHANIEL McLEAN, *Indian agent.*

I certify that the foregoing is a true copy of the power of attorney,
 as well as of Agent McLean's certificate attached thereto.

ALEXANDER RAMSEY.

EXHIBIT C.

*Abstract of traders' claims, under treaty of Traverse des Sioux, as rendered
 under oath.*

Alexis Bailly, forty-three thousand one hundred and twenty-two
 dollars.

N. W. Kiptson, three thousand four hundred and sixty dollars.

Gabrielle Renville, eight hundred and twenty-seven dollars.

American Board of Missions, eight hundred and twenty-five dollars.

P. Prescott, one thousand three hundred and thirty-four dollars.

F. Steele, four thousand nine hundred and fifty dollars.

H. H. Sibley, agent American Fur Company, one hundred and
 forty-four thousand nine hundred and eighty-four dollars and forty
 cents.

Joseph R. Brown, eight thousand dollars.

Estate of L. Provincelle, thirty thousand five hundred dollars.

Estate of Joseph Reinville, thirty thousand dollars.

J. Bt. Farribault, thirty-three thousand dollars.

Alexander Farribault, eighteen thousand dollars.

Joseph Laframbois, fourteen thousand dollars.

Estate of Fr. Fresnier, fourteen thousand two hundred and seventeen
 dollars.

Martin McLeod, twenty-five thousand and forty dollars.

Lewis Roberts, seven thousand five hundred dollars.

William Hartshorne, one thousand seven hundred and sixty-four
 dollars.

Fr. Labatte, five hundred dollars.

Henry Jackson, three hundred and thirty-seven dollars and thirty-
 eight cents.

Hazen Moors, one thousand dollars.

R. M. McKenzie, for Columbia Fur Company, fifty-seven thousand
 one hundred and seventy-five dollars.

J. H. Lockwood, one thousand four hundred dollars.

Total amount, four hundred and thirty-one thousand seven hundred
 and thirty-five dollars and seventy-eight cents.

I certify that the several accounts above were rendered to me, under
 oath in each case, respectively, and that the several accounts, with the
 oath as taken and subscribed, are now in my possession.

ALEXANDER RAMSEY.

ABSTRACT B.—(See voucher No. 4 in this abstract.)

MINNESOTA SUPERINTENDENCY.—Abstract of disbursements made by Alexander Ramsey, superintendent, &c., to the See-see-toan and Wah-pay-toan Sioux, on account of treaty stipulations, for the quarter ending December 31, 1852.

Date.	No.	To whom paid.	For what paid.	To the chiefs, to settle their affairs, &c., (removal and subsistence.)	Annuities.	Erection of mills, opening farms, &c.	Provisions.	Total.
Nov. 9	1	Henry M. Rice.....	Subsistence, &c.....	\$2,705 00	.....	.....	.....	.....
	2	.....do.....	.....do.....	259 00	.....	.....	.....	.....
	3	Nathaniel McLean, agent.....	Money annuity.....	.....	\$45,600 00	.....	.....	.....
	4	See-see-toan and Wah-pay-toan chiefs.....	Under 1st clause of 4th article treaty of Traverse des Sioux.....	250,000 00	.....	.....	.....	.....
Dec. 4	5	Marshall & Co.....	Subsistence.....	4,438 00	.....	.....	.....	.....
4	6	H. K. McKinstry.....	.....do.....	3,000 00	.....	.....	.....	.....
11	7	F. B. Sibley.....	Subsistence, See-see-toan.....	140 95	.....	.....	.....	.....
16	8	.....do.....	Subsistence, See-see-toan and Wah-pay-toan.....	2,520 12	.....	.....	.....	.....
16	9	Henry M. Rice.....	.....do.....	1,830 00	.....	.....	.....	.....
16	10	.....do.....	.....do.....	333 00	.....	.....	.....	.....
17	11	Benjamin Thompson.....	.....do.....	92 00	.....	.....	.....	.....
21	12	Anson Northrop.....	Subsistence, Wah-pay-toan.....	370 00	.....	.....	.....	.....
29	13	Nathaniel McLean, agent, &c.....	Subsistence, See-see-toan and Wah-pay-toan.....	1,500 00	.....	.....	.....	.....
31	14	Joseph R. Brown.....	Subsistence, transportation of.....	688 25	.....	.....	.....	.....
		Amount disbursed in the quarter.....		267,876 32	45,600 00	.....	.....	\$313,476 32
		On hand last quarter.....		.....	.....	.....	.....	.....
		Amount received in the quarter.....		275,000 00	45,600 00	\$5,000 00	\$4,000 00	329,600 00
		Total on hand.....		275,000 00	45,000 00	5,000 00	4,000 00	329,600 00
		Balance applicable to next quarter.....		7,123 68	.....	5,000 00	4,000 00	16,123 68

December 31, 1852.—I certify that the above abstract is correct and true.

ALEXANDER RAMSEY, SUPERINTENDENT.

Receipt of the chiefs of the See-see-toan and Wah-pa-toan bands of Sioux Indians to Alexander Ramsey, as per voucher No. 4, in abstract B.

We, the chiefs of the See-see-toan and Wah-pa-toan bands of Dakota or Sioux Indians, in open council assembled, do hereby acknowledge to have received of Alexander Ramsey, superintendent of Indian affairs, the sum of two hundred and fifty thousand dollars, under the first clause of the fourth article of the treaty of Traverse des Sioux of the 23d day of July, 1851; two hundred and ten thousand dollars of which we desire him to pay, in full acquittance of our just obligations at the date of said treaty, to our traders, agreeable to the distribution made at the time of the treaty aforesaid, and the balance to our relatives of mixed blood.

NOVEMBER 29, 1852.

E-tay-wah-ke-an, his x mark.
 Wah-noh-soon-ta, his x mark.
 Yah-zho-a-pee, his x mark.
 O-kee-tah, his x mark.
 Etchashkah-Skomahnee, his x mark.
 Wah-na-ta, his x mark.
 Nor-op-ton, his x mark.
 Wam-du-pi-du-ta, his x mark.
 A-kipa, his x mark.
 Intree-book-ar-dan, his x mark.
 O-tak-e-ta, his x mark.
 Hoopah-Inapehdoutah, his x mark.

Witnesses :

THOMAS FOSTER,
 JNO. C. KELTER, U. S. A.,
 CHARLES D. FILLMORE,
 WM. HENRY FORBES.

I certify, on honor, that the above account is correct and just, and that I have actually, this 29th of November, 1852, paid the amount thereof.

ALEXANDER RAMSEY.

EXHIBIT D.

The undersigned, claimants under the treaty of Traverse des Sioux, concluded on the 23d day of July, 1851, hereby authorize and request Alexander Ramsey, superintendent of Indian affairs, to pay the several amounts due us respectively, as distributed by the chiefs at the time of said treaty, to our agent and attorney, Hugh Tyler, and we hereby authorize and empower him to receipt for the same, which shall be in full discharge and acquittance of our claims against the See-see-toan and Wah-pa-toan bands of Dakota or Sioux Indians, up to the date of treaty.

Gabrella Renville, his x mark.
 Vital Boyer, his x mark.
 Thomas Damera, his x mark.
 Louis La Belle, his x mark.
 Baptiste Bousquette, his x mark.
 Francis Roi, his x mark.
 Semia Laplante, for wife, his x mark.
 Antonie Renville.
 Joseph Renville, jr.
 G. F. Ortley, by his trustee.
 M. McLeod.
 B. Farribault.
 Alexis Bailly.
 Wm. Henry Forbes.
 Wm. Hartshorne.
 H. H. Sibley.
 H. L. Dousman.
 Franklin Steele.
 Joseph R. Brown.
 Martin McLeod.
 Jos. Laframvais.
 Alex. Farribault.
 A. Graham.
 Louis Laramie, his x mark.
 Jos. Renville.
 Martin McLeod, trustee for M. E. Ortley, children, and others.
 Hypolite Depuis.
 Pierre Felix, his x mark.
 Levi Bird.
 Henri Pollard.
 Francis Largee, his x mark.
 Thos. Provincelle, his x mark.
 Aug. Rock, his x mark.
 H. L. Dousman, administrator of F. Fresnier.
 Chas. St. Antoine, his x mark, for self and family.
 F. Labatte.
 Hazen Mooers.
 J. H. Lockwood, per H. Dousman.
 N. W. Kittson, by H. H. Sibley.
 Louis Martin, his x mark.
 Jos. Laframvais, his x mark.
 Francois Laframbois.
 Angelique Provincelle, per Chas. St. Antoine, her x mark.
 Antoine Provincelle, per Chas. St. Antoine.
 Harriet Farribault, and children, per Alex. Farribault.
 K. Mackenzie, for self and Hazen Mooers.
 Louis Roberts, his x mark.
 P. P. Prescott.
 H. Dousman, }
 H. H. Sibley, } executors of Louis Provincelle, deceased.
 Henry Jackson, by H. H. Sibley, agent for Samuel Leech, assn

F. La Batte, for Henry Angee, and family.
Harriet Farribault, by Alex. Farribault.

Witnesses :

MARTIN McLEOD,
H. H. SIBLEY.

TRAVERSE DES SIOUX, *December 1, 1852.*

I certify that the foregoing is a true copy of the original power of attorney in my possession.

ALEXANDER RAMSEY.

Power of attorney of the half-breeds to Alexander Ramsey to pay their part of the money to Hugh Tyler.

The undersigned, claimants under the treaty of Traverse des Sioux, concluded on the 23d day of July, A. D. 1851, hereby authorize and request Alexander Ramsey, superintendent of Indian affairs, to pay the several amounts due us, respectively, as distributed by the chiefs at to the time of said treaty, to our agent and attorney, Hugh Tyler, and we hereby authorize and empower him to receipt for the same, which shall be in full discharge and acquittance of our claims against the Sec-see-toan and Wah-pa-toan bands of Dakota or Sioux Indians up to the date of the treaty.

MENDOTA, *Decemder 11, 1852.*

Francis Laframbois,	} By Jos. Laframbois.
Jos. Laframbois, Jr.,	
Isabella Frenier,	
Alex. R. McLeod.	
John B. Renville.	
Alex. D. Campbell.	
Chas. St. Antoine, his x mark.	
Chas. St. Antoine, for Angelique Provincelle, his x mark.	
Simeon Laplant, for Rosalie Roiz, or Leffler, his x mark.	
Chas. St. Antoine, for Antoine Provincelle, his x mark.	
Jos. Courselle, for self and sisters, his x mark.	
Jean Bp. Crecht, for his child, his x mark.	
Pierre Felix, for his two children, his x mark.	
Ant. S. Finley, for wife.	
Jos. R. Brown, for Le Grelot.	
Jean Rosseau, for wife.	
Wm. L. Quin, for wife and child.	
Louis Angee, for children, his x mark.	
Louis Bowen, his x mark.	
Jos. Provincelle.	
Geo. Provincelle, his x mark.	
Jos. Rolinelle, Jr., his x mark.	
Rosalie Renville, her x mark.	

Wm. Altenberge, for child.
 John Moore, his x mark.
 Thomas Provincelle, his x mark.
 Pierre Roullard, for his child.
 Louis Martin, for his children, his x mark.
 J. R. Claet, for children.

Witness: H. L. DOUSMAN.

I certify that the foregoing is a true copy of the original power of attorney in my possession.

ALEXANDER RAMSEY.

Hugh Tyler's receipt to Governor Ramsey for \$40,000 of the half-breed's money under their power of attorney, of December 11, 1852.

Received of Alexander Ramsey, superintendent of Indian affairs, the sum of forty thousand dollars, being the amount of claims due the half-breeds under the treaty of Traverse des Sioux, which sum I am to pay said half-breeds under the direction of said superintendent.

HUGH TYLER,
Attorney for half-breeds.

MENDOTA, December 11, 1852.

I certify that the foregoing is a true copy of the original receipt in my possession.

ALEXANDER RAMSEY.

EXHIBIT E.

List of claimants and traders, and the amount allowed each under the treaty of Trarerse des Sioux.

Bailly and Dousman, fifteen thousand dollars.
 N. W. Kitson, two thousand eight hundred and fifty dollars.
 Gabrielle Renville, six hundred and twenty-one dollars.
 S. R. Riggs, for American Board, eight hundred dollars.
 P. Prescott, one thousand three hundred and thirty-four dollars.
 Franklin Steele, three thousand two hundred and fifty dollars.
 Henry H. Sibley, sixty-six thousand four hundred and fifty-nine dollars.
 Jos. R. Brown, six thousand five hundred and sixty-four dollars.
 Jos. Provincelle, ten thousand and sixty-six dollars.
 Estate of Jos. Renville, sr., seventeen thousand five hundred and forty dollars.
 J. B. Farribault, twenty-two thousand five hundred dollars.
 Alexander Farribault, thirteen thousand five hundred dollars.
 Jos. Laframbois, eleven thousand three hundred dollars.

R. Fresnier, two thousand three hundred dollars.
Martin McLeod, nineteen thousand and forty-six dollars.
Lewis Roberts, seven thousand four hundred and ninety dollars.
——— Hartshorne, five hundred and thirty dollars.
Francis Labatte, five hundred dollars.
J. H. Lockwood, five hundred dollars.
Henry Jackson, three hundred dollars.
Hazen Mooers, one thousand dollars.
R. McKenzie, five thousand five hundred dollars.
W. H. Forbes, one thousand dollars.
Total, two hundred and nine thousand two hundred dollars.

Hugh Tyler's receipts to Governor Ramsey for \$210,000 under the power of attorney given him by the traders, December 1, 1852.

In virtue of a power of attorney to me given for that purpose, I hereby acknowledge to have received of Alexander Ramsey the sum of two hundred and nine thousand two hundred dollars, to be distributed as above.

HUGH TYLER, *Attorney, &c.*

ST. PAUL, *December 8, 1852.*

Received, St. Paul, December 16th, the further sum of eight hundred dollars, being the amount due S. R. Riggs for American board, and left with F. B. Sibley.

HUGH TYLER.

I certify that the foregoing is a true copy of the original receipts in my possession.

ALEXANDER RAMSEY.

EXHIBIT F.

Request of the Wah-pa-koo-ta bands of Sioux Indians for the payment of their traders.

We, the undersigned. chief, soldiers, and braves, of the Wah-pa-koo-ta band of Sioux Indians, having this day concluded a treaty with Luke Lea and Alexander Ramsey, commissioners on the part of the United States, whereby we have ceded to the United States certain lands for a valuable consideration, and being desirous to pay our traders the sum of money which we acknowledge to be justly due to them, do hereby bind and obligate ourselves, as the authorized representatives of the aforesaid band, to pay to the individuals hereinafter designated the sum of money set opposite to their respective names, so soon as the same

shall be paid to us, in accordance with the fourth article of the treaty aforesaid, which provides for the payment of a certain sum to us as soon as practicable after our removal, and the necessary appropriation shall be made by Congress for arranging our affairs preparatory to our removal to the country designated in said treaty for our future abode, and for other purposes; and as it is specified that said sum shall be paid in such manner as requested by the chiefs in open council, therefore we do hereby, in open council, request and desire that the said sums below specified shall be paid to the persons designated as soon as practicable after the necessary appropriations shall be made by Congress for this purpose; and for this payment, well and truly to be made, we hereby solemnly pledge ourselves and the faith of our nation, and we do hereby release and acquit the United States, upon the payment of the sums aforesaid as herein specified, from any further liability to us or to our nation for so much of the amount so to be paid, as is provided for in the fourth article of the treaty aforesaid.

Dated at Mendota, in the Territory of Minnesota, on this fifth day of August, A. D. eighteen hundred and fifty-one.

Schedule of amounts to be paid, in accordance with the foregoing obligation by the Wah-pa-koo-ta band of Sioux Indians, viz:

Alexander Farribault, forty-two thousand dollars.

Henry H. Sibley, thirty-one thousand five hundred dollars.

Duncan Campbell, five hundred dollars.

James Wells, one thousand dollars.

Augustine Root, one thousand dollars.

Alexis Bailly, nine thousand dollars.

H. L. Dousman, four thousand dollars.

Philander Prescott, one thousand dollars.

Witness our hands:

Hoo-sha-sha, his x mark.

Pa-pay, his x mark.

Ha-pee, his x mark.

Ho-tain, his x mark.

Mon-e-pee-washe-chow, his x mark.

Jegree-sapa, his x mark.

Muhah-a-kan-a-waw-kan, his x mark.

In presence of—

PHILANDER PRESCOTT, *Superintendent of farming for Sioux.*

HUGH CARLTON HINMAN,

FREDERICK B. SIBLEY.

I certify, that on the 15th day of October, A. D. 1851, there appeared before me the chief, soldiers, and braves, of the Wah-pa-koo-ta band of Sioux Indians, seven in number, and, in open council, signed the foregoing obligation in my presence, after it had been read to them and fully explained.

NATHANIEL McLEAN, *Indian Agent.*

OFFICE INDIAN AFFAIRS,

September 1, 1852.

I certify, that the above and foregoing is a correct copy of the original,
this day filed in this office.

LUKE LEA, *Commissioner*.

MENDOTA, November 10, 1852.

His excellency Alexander Ramsey is hereby authorized to pay the
within sum to Henry H. Sibley.

ALEXANDER FARRIBAULT.

H. L. DOUSMAN.

ALEXIS BAILLEY.

AUGUSTIN ^{his} X ROOT.JAMES WELES.
^{mark.}

PHILANDER PRESCOTT.

—

*Henry H. Sibley's receipt to Governor Ramsey for \$90,000 of the Wah-pa-
koo-ta money for disbursement to the traders.*

Received of Alexander Ramsy, superintendent of Indian affairs,
ninety thousand dollars, in full of the within obligation.

H. H. SIBLEY.

MENDOTA, November 11, 1852.

I certify, that the within and foregoing is a true copy of the paper as
certified by Commissioner Lea, and of the authority to Mr. Sibley to
receive the money for the traders, and of Mr. Sibley's receipt to me for
the money.

ALEXANDER RAMSEY.

ABSTRACT C.—[See vouchers Nos. 1 and 4 in this abstract.]

MINNESOTA SUPERINTENDENCY.

Abstract of disbursements made by Alexander Ramsey, superintendent, &c., to the Medawakanton and Wahpakoota Sioux, on account of treaty stipulations, for quarter ending December 31, 1852.

Date.	No.	To whom paid.	For what paid.	To the chiefs of the Medawakanton Sioux, to settle their affairs, removal, subsistence, &c.	To the chiefs of the Wahpakoota Sioux, to settle their affairs, removal, and subsistence.	Annuities.	Building mills, opening farms, &c.	Provisions.	Total.
1852.									
Nov. 8	1	Wahpakoota chief, &c.....	Under the 1st clause 4th article treaty of Mendota.....	\$90,000 00					
9	2	Nathaniel McLean, agent, &c.	Money annuity.....			\$40,005 18			
9	3	Henry M. Rice.....	Subsistence.....		\$2,675 00				
9	4	Medawakanton chiefs.....	Under the 1st clause 4th article treaty of Mendota.....		90,000 00				
Dec. 4	5	H. K. McKinstry.....	Subsistence, Wahpakoota.....	160 00					
4	6	.....do.....	Subsistence, Medawakanton.....		688 00				
11	7	F. B. Sibley.....	Subsistence, Wahpakoota.....	2,967 50					
		Amount disbursed in quarter.....		93,127 50	93,363 00	40,005 18			\$226,495 68
		On hand last quarter.....							
		Amount received in quarter.....		110,000 00	110,000 00	40,005 18	\$5,000 00	\$5,000 00	270,005 18
		Total on hand.....		110,000 00	110,000 00	40,005 18	5,000 00	5,000 00	270,005 18
		Balance applicable to next qr.....		16,872 50	16,637 00		5,000 00	5,000 00	43,509 50

December 31, 1852.—I certify that the above abstract is correct and true.

ALEXANDER RAMSEY.

Receipt of the Chief and Headmen of the Wah-pa-koo-ta band of Sioux Indians to Alexander Ramsey, being voucher No. 1 in abstract C.

MENDOTA, November 8, 1852.

We, the chief and headmen of the Wah-pa-koo-ta band of Sioux or Dakota Indians, in open council assembled, do hereby acknowledge to have received of Alexander Ramsey, superintendent of Indian affairs, the sum of \$90,000, under the first clause of the fourth article of the treaty of Mendota, of the 5th of August, 1851, all of which we desire him to pay, in full acquittance of our just obligations, at the date of said treaty, to our licensed traders.

HOO-SHAW-SHAW, his x mark.

PAY-PAY, his x mark.

TAH-TAY-OH-TAH-MON-NA, his x mark.

TAH-OH-TEN-AH-DOO-TAH, his x mark.

Witnesses :

C. D. FILLMORE,

ROGER JONES, *Lieutenant U. S. A.*

JOHN C. KELTON, *U. S. A.*

FRANKLIN STEELE,

WM. HENRY FORBES, *Interpreter.*

I certify, on honor, that the above account is correct and just, and that I have actually, this 8th day of November, 1852, paid the amount thereof.

ALEXANDER RAMSEY.

Receipt of the Chiefs of the Med-a-wa-kan-ton bands of Sioux Indians to Alexander Ramsey.

MENDOTA, November 9, 1852.

We, the chiefs of the Med-a-wa-kan-ton band of Sioux or Dakota Indians, in open council assembled, do hereby acknowledge to have received of Alexander Ramsey, superintendent of Indian affairs, the sum of \$90,000, under the first clause of the fourth article of the treaty of Mendota, of the 5th of August, 1851; \$70,000 of which we desire him to pay, in full acquittance of our just obligations, at the date of said treaty, to our licensed traders.

Wa-ba-shaw, his x mark.

Wah-coo-ta, his x mark.

Tah-o-ah-ta-doo-ta, his x mark.

Tah-chan-koo-wash-tah, his x mark.

Shak-o-pee, his x mark.

We-chonk-pee, his x mark.

Mah-zah-ho-tah, his x mark.

Hoo-hy-pah, his x mark.

Waza-yu-wa-meno-ha, his x mark.

Chard-o-peh, his x mark.

Eto-hen-o-ha, his x mark.

Wan-pegno-wa-hay-tah, his x mark.

Witnesses :

CHARLES D. FILLMORE,
 FRANKLIN STEELE,
 S. J. FRIDLEY,
 ANT. FINDLEY,
 JACK TRACY,
 JOSEPH LABATHE,
 HAYNE MORRIS,
 NATHANIEL MCLEAN, *Indian Agent*.
 A. D. WILSON, *First Lieutenant, 6th Infantry*.

I certify, on honor, that the above account is correct and just, and that I have actually, this 9th of November, 1852, paid the amount thereof.

ALEXANDER RAMSEY.

 EXHIBIT G.

ST. PETER'S AGENCY, *November 11, 1852.*

The undersigned, chiefs of the Med-a-wa-kan-ton bands of Dakota or Sioux Indians, acknowledge to have received of Alexander Ramsey, superintendent of Indian affairs, each of us, the sum of two thousand eight hundred and fifty-seven dollars and fourteen and two-seventh cents.

Ce-tan-wa-ku-a-mani, his x mark.
 Shak-o-pee, his x mark.
 Tah-chan-koo-wash-tah, his x mark.
 Mock-pee-wee-chas-tah, his x mark.
 Mah-zah-ho-tah, his x mark.
 Wah-koo-tay, his x mark.
 Wa-ba-shaw, his x mark.

Witnesses :

NATHANIEL MCLEAN, *Indian Agent*.
 A. ROBERTSON,
 JOHN GEORGE LEMON,
 ALEXANDER FARRIBAULT,
 FRANKLIN STEELE.

 EXHIBIT H.

List of licensed traders with the Med-a-wa-kan-toan Sioux, between 1837 (the date of the former treaty) and 1851.

James Wells, at Lake Pepin.
 Francis Labatte, with lower band.
 Thomas Odell and McBoal, opposite St. Paul.
 Philander Prescott, under Baker's license.

Henry H. Sibley, at Mendota.
 Alexander Farribault, at Mendota.
 Alexis Bailey, at Wabashaw.
 Jean B. J. Farribault, at Six's village.
 W. G. & G. W. Ewing, Godfrey's license, at Good Road's village.
 Joseph Buisson, under Well's license, at Lake Pepin.
 Franklin Steele, N. W. Kittson's license, Cold Water.
 Alexis P. Bailey, at Wabashaw.
 Henry G. Bailey, at Olive Grove.
 Oliver Farribault, at Six's village.
 Joseph J. Frazer, at Red Wing.
 Augustin Rock, at Lake Pepin.
 H. D. White, at Red Wing.
 David Farribault, at Six's village, under J. B. Farribault.
 R. P. Russell, 1846, at Good Road's village.
 ST. PETER'S AGENCY, *December 8, 1852.*

I certify that the above comprises the names of all who have received licenses to trade within this agency with the Med-a-wa-kan-ton band of Sioux, between the year 1837 and the date of the treaty of 1851, at Mendota.

P. PRESCOTT.

I certify that the foregoing is a true copy of the original paper in my possession. Mr. Prescott has been interpreter, superintendent of farming, &c., for the Sioux, all the time above referred to.

ALEXANDER RAMSEY.

EXHIBIT I.

The traders' power of attorney to Hugh Tyler, for the amount due from the Med-a-wa-kan-toan band of Sioux Indians:

The undersigned, licensed traders and claimants under the treaty of Mendota, concluded on the 5th day of August, A. D. 1851, hereby authorize and request Alexander Ramsey, superintendent of Indian affairs, to pay the several amounts due us from the Med-a-wa-kan-toan band of Dakota or Sioux Indians, to our agent and attorney, Hugh Tyler; and we hereby authorize and empower him to receipt for the same, which shall be in full discharge and acquittance of our claim against said Indians, up to the date of the treaty of Mendota.

DECEMBER 11, 1852.

P. PRESCOTT.
 FRANKLIN STEELE.
 JOSEPH FRAZER, per F. Steele.
 JOSEPH BROWN.
 H. H. SIBLEY.
 ALEXIS BAILLEY.
 ALEXANDER FARRIBAULT.

JOS. LAFRAMBOIS.
JOS. RENVILLE.
F. LABATTE.
AUGUSTIN ROCK, his x mark
JAS. McBOAL.
B. FARRIBAULT.
ALEXIS BAILLEY,
for H. G. Bailey.
ALEXIS FARRIBAULT,
for estate of O. Farribault, dec'd
JOS. BUISSON, his x. mark.
JAS. WELLS,
by his attorney, H. H. Sibley.

Witness : A. L. DOUSMAN.

Hugh Tyler's receipt to Governor Ramsay, for \$70,000.

I, Hugh Tyler, attorney for claimants under the treaty of Mendocino of the 5th day of August, 1851, hereby acknowledge to have received of Alexander Ramsey, superintendent of Indian affairs, the sum of seventy thousand dollars, for distribution among licensed traders.

HUGH TYLER

ST. PAUL, *December* 13, 1852.

I certify that the foregoing is a true copy of the power of attorney of
Hugh Tyler, and of his receipt to me.

ALEXANDER RAMSEY.

EXHIBIT K.

List of traders' names, with the amount of their claims against the Mat-wa-kan-toan band of Sioux, as filed with me, under oath, respectively.

H. H. Sibley, thirty-seven thousand seven hundred and twenty-~~two~~
dollars and seven cents.

McBoal & Odell, six hundred and thirty-nine dollars and ~~ninety~~
three cents.

Alexis Bailey, twenty thousand one hundred and eight dollars.

James Wells, fifteen thousand dollars.

Frs. Labatte, five thousand dollars.

Philander Prescott, one thousand one hundred and eighty-two dollars and ten cents.

Alexis Farribault, nine thousand dollars.

J. B. Farribault, thirteen thousand dollars.

Jos. Buisson, two thousand dollars.

Franklin Steele, seven thousand dollars.

Henry G. Bailey, four hundred and eighty-three dollars.

Estate of O. Farribault, two thousand dollars.

Jos. J. Frazer, five thousand dollars.

Augustine Rock, five thousand dollars.

Jos. Laframbois, one thousand dollars.

Jos. Renville, deceased, two thousand dollars.

W. G. & G. W. Ewing, three thousand seven hundred and fifty dollars.

Total. One hundred and twenty-nine thousand eight hundred and eighty-five dollars and ten cents.

I certify that the above is a correct abstract of the several accounts filed with me, and sworn to by the claimants, respectively.

ALEXANDER RAMSEY.

The following is the protest of the chiefs and headmen of the See-see-toan and Wah-pa-toan bands of Sioux Indians, addressed to the President of the United States, against the late payment of the \$275,000 under the treaty of July 23, 1851, pursuant to the arrangement made by the "Traders' Paper," which they pronounce fraudulent, &c.

To our Great Father, the PRESIDENT OF THE UNITED STATES:

Whereas, by the treaty made at Traverse des Sioux, on the 23d day of July, A. D., 1851, by and between Hon. Luke Lea and Governor Alexander Ramsey, on the part of the United States, and the undersigned, on the part of the See-see-toan and Wah-pa-toan bands of the Sioux or Dakota nation of Indians, it was stipulated and agreed, on the part of the United States, that our said bands should receive, in part payment for the lands then ceded by them, the sum of two hundred and seventy-five thousand dollars, "to enable them to settle their affairs, to comply with their just engagements, for expenses of the removal of said bands from the lands ceded, and for subsistence of themselves for one year thereafter," to be paid "as the chiefs in open council shall direct;" and whereas, it is the earnest desire of the undersigned that the said sum of two hundred and seventy-five thousand dollars may be disposed of in such a manner as shall insure the payment of all our just liabilities and engagements, and in all respects conform with the spirit and stipulations of our treaty; and whereas, at the late payment made to our bands at Traverse des Sioux, our frequently expressed wishes in this respect were disregarded; and whereas, it is intimated and understood that a paper, or obligation, is now in the possession of certain interested and designing persons, claimed and purporting to have been signed and executed by us at the time of our signing the treaty of Traverse des Sioux, of the existence of which paper neither the undersigned nor their bands had any knowledge at the time it is claimed to have been executed; and whereas, such paper, if any exists, is fraudulent and unjust, and calculated to do great injustice to a large number of our most meritorious creditors, and confer large amounts upon a few individuals, a large portion of whose claims we believe to be imaginary and fraudulent; and whereas, should any por-

tion of our treaty funds be withheld from us, in consequence of such fraudulent paper, it will be manifestly wrong and unjust, and directly in defiance of the wishes of the undersigned and our people, and contrary to treaty stipulations :

Therefore, the undersigned, being a majority of the chiefs and headmen of the See-see-toan and Wah-pa-toan bands of the Sioux or Dakota nation of Indians, and as such, fully competent and authorized to transact any and all business in behalf of our said bands, do hereby humbly protest against the payment of any part of the said sum of two hundred and seventy-five thousand dollars being made on any pretended claims or demand against our said bands until the justice of such claims or demands shall have been reasonably established and proven, and no payment ordered by us in the manner contemplated by our treaty; and we would respectfully ask that our Great Father will regard this our national protest and request, and make such orders in the premises as will insure a fair and impartial investigation of our liabilities, and prevent any portion of our treaty funds from being paid upon any pretended claim, or otherwise disposed off in any manner contrary to the stipulations of our late treaty.

In testimony whereof we have hereunto set our marks and affixed our seals in national council, at Traverse des Sioux, on this third day of December, A. D. 1852.

E-yang-mo-nee, or Big Gun, his x mark,	[L.S.]
E-tay-wah-ke-an, or Limping Devil, his x mark,	[L.S.]
Mah-yah-shah, or Red Iron, his x mark,	[L.S.]
Wamdinahotonmanie, or Eagle that Crows, his x mark,	[L.S.]
Mock-pee-we-chas-tah, or Cloud Man, his x mark,	[L.S.]
Matotamahica, or Lean Bear, his x mark,	[L.S.]
Tape-ta-tan-kan, or His Big Fire, his x mark,	[L.S.]
Tawankanhedimaza, or Lightning Iron, his x mark,	[L.S.]
Mazaska, or White Silver, his x mark,	[S.S.]
Takara, or The Enemy, his x mark,	[L.S.]
Hehutedan, or Rooted Horn, his x mark,	[L.S.]
Susmakeduta, or Red Seeds that Rattle, his x mark,	[L.S.]
Marpiyahdinape, or	
The Cloud that Makes His Appearance, his x mark,	[L.S.]
Tusewanileton, or The Shining City, his x mark,	[L.S.]

Signed and sealed in presence of—

A. J. CAMPBELL,
DANIEL OLMSTEAD,
J. B. HUGGINS,
CORNELIUS E. SHASSOR,
A. G. HUGGINS,
J. W. HOLTSCLOW.

TERRITORY OF MINNESOTA, }
County of Dakota, } ss.

I hereby certify that the chiefs and headmen of the See-see-toan and Wah-pa-toan bands of the Sioux or Dakota nation of Indians, whose names are appended to the within instrument or protest, being

examined by me, acknowledge that they signed the same with a full knowledge of its contents and meaning, and for the uses and purposes therein expressed. I also certify, that A. J. Campbell, who in my presence interpreted the same to the said chiefs and headmen, was by me duly sworn that he did true interpretation make of the contents of said instrument to said council, and that the said council was composed of a majority of the chiefs of said bands.

Done at Traverse des Sioux, this third day of December, A. D. 1852.

WILLIAM B. DODD,
Justice of the Peace.

OFFICE OF THE SECRETARY OF MINNESOTA TERRITORY,
St. Paul, December 9, 1852.

I, Alexander Wilkin, secretary of said Territory, do hereby certify that William B. Dodd, before whom the annexed affidavits and acknowledgments were taken, was, at the time of taking thereof, and now is, a justice of the peace in and for Dakota county, legally commissioned, sworn into office, and duly authorized to take depositions, acknowledgments of deeds, and do other official acts; and to all of his said official acts full faith and credit are due and ought to be given.

In testimony whereof, I have hereunto set my hand and affixed the great seal of the said Territory, this ninth day of December, in the year of our Lord one thousand eight hundred and fifty-two, [L. s.] and of the independence of the United States of America the seventy-sixth.

ALEXANDER WILKIN,
Secretary of Minnesota Territory.

Protest of the chiefs, headmen, and braves of the See-see-toan, Wah-pah-toan, Med-a-wa-kan-toan, and Wah-pa-koo-ta bands of Sioux Indians, addressed to the President of the United States, against the payment of their money to the traders, otherwise than is stipulated by the treaties of the 23d July, and 5th of August, 1851.

To our Great Father, the PRESIDENT OF THE UNITED STATES:

We, the undersigned, chiefs, headmen, and braves of the See-see-toan, Wah-pa-toan, Med-a-wa-kan-toan, and Wah-pa-koo-ta bands of the Sioux or Dakota nation of Indians, being a majority of said chiefs, headmen, and braves, and as such fully competent to transact national business, would most respectfully represent to you that soon after or about the time and date (the twenty-third day of July, and the fifth day of August, A. D. eighteen hundred and fifty-one) of our treaties with the government of the United States, wherein the Hon. Luke Lea and Governor A. Ramsey acted as commissioners on behalf of the United States, we did sign an obligation to our creditors, or those assuming to be such, which obligation we are informed and believe binds us and

our people to pay large and extravagant sums in money to our said creditors; sums we do not owe, and never intended to obligate ourselves or people to pay.

And whereas said agreements were obtained from us through fraud, misrepresentation, and deceit—they never having been fully explained and interpreted to us by said traders, or those acting for them; we never having understood by any interpretation made by our said traders, or any one acting for them, that we were binding ourselves and people to the payment of a sum equal to from one-fourth to half a million of dollars, or any other amount. At the time of signing said papers we believed them duplicates of the treaties made with our father, the President, and necessary to carrying into full effect the treaties aforesaid, an object much desired by us; the result of which, we believed, would be to the benefit of our people, to the interest of the United States, and gratifying to the feeling of our Great Father, the President, and our friend the Hon. Luke Lea, commissioner, &c., &c., towards whom we formed strong attachments for his honorable and just conduct to us in all the relations which we have sustained to him, and towards whom we entertain feelings of the strongest regard, and would with reluctance do any act which would receive his disapprobation, however much our interests would be exposed. In this act we feel assured, from our knowledge of him, that we will not incur his displeasure by attempting to correct an error which we have been by fraud and misrepresentation led into, but will meet and receive his cordial approbation and co-operation in our behalf.

Had we hearkened to the council and advice of our friend, the Hon. Luke Lea, and disregarded the advice of our traders aforesaid, we would have been saved this trouble, and our people relieved from the painful anxiety of the payment of the fraudulent demands aforesaid. And, in view of the considerations aforesaid, we most solemnly protest against the payment (by our Great Father, the President of the United States, or any other person having charge of our money as disbursing officer of the government, or in any other capacity,) of any money belonging to our said nation or bands, (by virtue of the treaties aforesaid) to our traders aforesaid, or to any other person having claims against us.

We ask and expect to receive the aid of our Great Father, the President of the United States, to protect us against the payment of any and all unjust demands, and particularly against the fraudulent contracts aforesaid.

Believing that our interests will be fully cared for and protected by and through the aid of our Great Father, the President, we have with confidence made this appeal for his timely aid and protection, to save our women and children from the starvation and distress which the payment of the aforesaid fraudulent contracts would most certainly produce.

Signed in open council, at St. Peter's agency, this, the 6th day of December, A. D. eighteen hundred and fifty-one.

E-yang-mo-nee, his x mark.

Mock-pee-we-chas-tah, his x mark.

Extermaphah, his x mark.

Mah-zah-shah, his x mark.
 Wan-ax-ate, his x mark.
 Yajopi, his x mark.
 Wamdinahouton-moni, his x mark..
 Waumdicohija, his x mark.
 Eteshakeye, his x mark.
 Zahaupahdue, his x mark.
 Etecoka, his x mark.
 Mazokutemani, his x mark..
 Zokara, his x mark.
 Ecaskankanmani, his x mark.
 Anongwamani, his x mark.
 Zoteage, his x mark.
 Tawaxecuota, his x mark.
 Wecayaza, his x mark.
 Arkusin, his x mark.
 Cante, his x mark.
 Wa-ba-shaw, his x mark.

In presence of—

JOSEPH CAMPBELL.
 ELI PETTIJOHN.
 W. F. MASTERSON.
 ALEXANDER WILKIN.

—

Personally appeared before me, this 10th day of December, A. D. 1851, all the parties to the foregoing instrument, whose names are thereunto signed, except Tawaxecuota and Wa-ba-shaw, and they severally acknowledged that they signed the foregoing instrument freely and voluntarily, for the uses and purposes therein expressed; and at the same time appeared before me Joseph Campbell, to me personally known, who, being by me duly sworn, testified that he knows the language spoken by the Sioux Indians, and that he is personally acquainted with the Indians whose names are signed to the foregoing instrument; that the said instrument, before being signed by them, was correctly interpreted and read to them, in his presence, by Philander Prescott, government interpreter for the Sioux; and that after being so interpreted and read, the said instrument was then signed in his presence by the persons whose names are thereunto subscribed; and that the persons who appeared before me and acknowledged it are the identical persons (excepting the two above named) who executed the foregoing instrument, and that their names are severally correctly subscribed thereto.

HENRY F. MASTERSON,
Notary Public, Ramsey County, Minnesota Territory.

—

TERRITORY OF MINNESOTA, *Ramsey County*, ss :

Joseph Campbell, of Traverse des Sioux, in said Territory, being duly sworn, deposes and says, that he resides among the See-see-toan

and Wah-pa-toan bands of Sioux or Dakota Indians, and speaks and understands their language; that he was present, on the 6th day of December, at a council held at St. Peter's agency, in the presence of Nathaniel McLean, Sioux agent, at which a majority of the chiefs, headmen, and braves of said bands were present; that upon said occasion said Indians heard interpreted the annexed protest, and signed the same in his presence, it having been interpreted to them by Philander Prescott, the government interpreter; that they did assent thereto, and requested the said agent to send the same to their great father, the President; to which he replied that he would take until the next day to consider about it.

That another council was held at the same place, with the agent on the 10th day of December instant, and that all of the Indians whose names appear to said protest were present except two, who could not be found. That the agent, through the government interpreter, asked them if they were still of the same mind as upon the former occasion, and that they replied affirmatively. That they again signed and acknowledged said protest, and again requested said agent to sign and send on the same, together with other papers, to their great father, the President.

JOSEPH CAMPBELL

Sworn to and subscribed before me, at St. Paul, Minnesota Territory, this 10th day of December, 1851.

HENRY F. MASTERSON,
Notary Public

OFFICE OF SECRETARY OF MINNESOTA TERRITORY,
St. Paul, December 10, 1851

I, Alexander Wilkin, secretary of said Territory, do hereby certify that Henry F. Masterson, before whom the annexed acknowledgment and affidavit were taken, was, at the time of taking thereof, and now is, a notary public for the county of Ramsey, legally commissioned, sworn into office, and duly authorized to take depositions, acknowledgments of deeds, and do other official acts; and to all of his said official acts full faith and credit are due and ought to be given.

In testimony whereof, I have hereunto set my hand and affixed the great seal of the said Territory, this 10th day of December, in the year of our Lord one thousand eight hundred and fifty one, and of the independence of the United States of America the seventy-fifth.

ALEXANDER WILKIN,
Secretary of Minnesota Territory

The following statement by Governor Ramsey will show how the removal and subsistence funds of the Indians, under the late treaties, were disposed of by him, as superintendent, up to the time that he

balances of these funds were turned over to his successor, Governor Gorman :

I retained, on account of removal and subsistence of the See-see-toan and Wah-pa-toan Sioux, as authorized by the instructions of Commissioner Lea, of October 4, 1852, the sum of.....	\$25,000
Expended of this fund for subsistence, 4th quarter, 1852.....	\$17,876 32
Expended of this fund for subsistence, 1st quarter, 1853.....	1,055 45
Balance on hand paid Governor Gorman, May 16, 1853.....	6,068 23
	<hr/> 25,000 <hr/>

I retained, on account of removal and subsistence of the Wah-pa-koo-ta Sioux, \$20,000; and on account of the Med-a-wa-kan-toan, \$20,000.....	\$40,000
	Med-a-wa-kan-toan. Wah-pa-koo-ta.
Expended of these funds for subsistence, 4th quarter, 1852.....	\$3,363 00 \$3,127 00
Expended of these funds for subsistence, 1st quarter, 1853.....	1,231 25 837 85
Expended of these funds for subsistence, 2d quarter, 1853.....	161 35 302 50
Balance on hand paid Gov. Gorman, May 16, 1853.....	15,479 90 15,496 65
	<hr/> 39,999 50 <hr/>

These disbursements were made out of the subsistence fund, under authority of the instructions of Commissioner Lea, of October 4, 1852, (these letters are in Governor Gorman's possession,) the power of attorney given me by the See-see-toan and Wah-pa-toan Sioux, and by virtue of the general authority of the office of superintendent of Indian affairs, conferred upon me.

The treaty of Mendota contemplates a consolidation of the Med-a-wa-kan-toan and Wah-pa-koo-ta bands into one. As this purpose would be defeated should they continue to have provisions, &c., distributed to them after their arrival in their new homes upon the old restrictive system, I deemed it my duty to merge what of their funds for removal and subsistence remained into a common treasure; my advertisement for provision for the Lower Sioux was predicated upon this view.

The See-see-toan and Wah-pa-toan Sioux, always having been in a needy condition, and living, all but the Little Rapids and Traverse des Sioux bands, within, or north and west of, the Indian reservation, I thought it due to them to use their funds exclusively for the purchase of provision, and have them remove themselves, as, living on the river Minnesota, they could readily do. Along with the sum of \$6,068 23 removal and subsistence fund, I, at the same time, turned over to Governor Gorman \$4,000 for provisions due the See-see-toan and Wah-pa-toan Sioux, for the year ending June 30, 1853. This I might properly

have expended for provisions, instead of drawing, to the extent I did, on the removal and subsistence fund; but did not do so, because I considered this money at any time applicable to this purpose.

The Med-a-wa-kan-toans at all times declined having any assistance in their removal; they at all times informed me that they would prefer removing themselves, families, &c., in the ordinary way, in canoes.

The statement of expenditures on account of the See-see-toan and Wah-pa-toan Sioux, exhibits a deficit of fifty cents on the credit side. This is, doubtless, an error in calculation, and will be corrected at Washington, where all these accounts have long since been.

ALEXANDER RAMSEY.

His Excellency Governor GORMAN,
Hon. Judge YOUNG,

Commissioners, &c.

SEPTEMBER 12, 1853.

On the 10th day of January, 1853, the following resolution was passed by the Senate of the United States, to wit:

IN THE SENATE OF THE UNITED STATES.—JANUARY 10, 1853.

Resolved, That the Committee on Indian Affairs be instructed to inquire into the allegations of fraud contained in certain of the public prints with regard to the disbursement by Alexander Ramsey, superintendent of Indian affairs, of the money appropriated to carry out the stipulations of the treaties concluded with the Dakota or Sioux Indians, in the year eighteen hundred and fifty-one.

Attest:

ASBURY DICKINS, *Secretary*.

The following resolution was adopted by the Senate on the 17th day of January, 1853, to wit:

IN THE SENATE OF THE UNITED STATES.—JANUARY 17, 1853.

On motion of Mr. Sebastian,

Resolved, That the Committee on Indian Affairs be authorized to send for papers, and to call persons before them to be examined under oath, touching the matters contained in the resolution of the Senate of the 10th of January, referred to said committee.

Attest:

ASBURY DICKINS, *Secretary*.

And after the examination of a few witnesses by the Committee on Indian Affairs of the Senate of the United States, without having come to any conclusion, and without having made any report upon the subject matter submitted to it for investigation as aforesaid, the following resolution was adopted by the Senate, on the 5th of April, 1853, to wit:

IN THE SENATE OF THE UNITED STATES.—APRIL 5, 1853.

Resolved, That the President be, and he is hereby, requested to cause to be investigated the charges of fraud and misconduct in office alleged against Alexander Ramsay, superintendent of Indian affairs in Minnesota Territory, and which were referred to the Committee on Indian Affairs, by resolution of the 10th of January last; and to report the result of such investigation to the Senate at the next session of Congress, and that the record of the proceedings of said committee, under said resolution, be referred to the President, and be subject to such order as he may make thereon.

The foregoing statement, embracing as well the letter of explanation by Governor Ramsey, to the Commissioner of Indian Affairs, of January 15, 1853, with copies of the papers, vouchers and accounts therein referred to, showing the manner in which his disbursements of the money appropriated to fulfil the stipulations of the treaties with the Sioux Indians in July and August, 1851, were made by him; as the charges of official delinquency preferred against him by Madison Sweetser and Daniel A. Robertson, in reference to said disbursements, presents at one view the principal matters involved in this investigation.

These charges, already made in detail, with specifications in particular cases, may for convenience be reduced to the following heads:

1st. He is charged with having confederated or co-operated with Henry H. Sibley, Hercules L. Dousman, Doctor Charles W. Borup, Joseph R. Brown, Franklin Steele, Hugh Tyler, Charles D. Fillmore, and others, for the purpose of absorbing the whole fund intended for the Sioux Indians, by the 4th articles of the treaties of July and August, 1821, by payments to favorite claimants or traders, to the exclusion of meritorious creditors, who were not permitted to share in the said distributions.

2d. With having received from the United States, (593,050,) five hundred and ninety-three thousand and fifty dollars, in the "*national currency*," for disbursement to the Sioux Indians, under the provisions of the said treaties; and with having deposited the same in one or more banks in the city of New York, in violation of the laws of the United States; and also with having exchanged the greater part of the *gold coin* thus deposited, for *bank notes* and *drafts*, contrary to law and the instructions of the Indian Department.

3d. With having paid accounts against the United States, officially, on contracts for supplying the Indians with provisions, goods, &c., in *bank notes* and *drafts*, instead of the *gold coin*, which was originally received by him for that purpose.

4th. With having refused to pay to the Sioux Indians the money intended for them under the 4th articles of the treaties of July and August, 1851, although repeatedly and earnestly requested so to do, by the chiefs; with having resorted to threats and force, and other acts of cruelty and oppression, to overawe and intimidate, and thereby to compel them to consent to the payment of this money to the "*traders*;" and with having, in the end, paid over the greater part of the said money to one Hugh Tyler, for payment or distribution to the "*traders*"

and "half breeds," contrary to the wishes and remonstrances of the Indians; in violation of law and the stipulations contained in said treaties, and also in violation of his own solemn pledges, previously made to them, in regard to said payments.

5th. With having directed or permitted the greater part of the money to be paid *directly* to the "traders" and "employees" who were, or had been, connected with the "American Fur Company," and the fur company of "Pierre Choteau, jr., and Company," by the said Hugh Tyler, who had been employed by them for that purpose, contrary to the repeated remonstrances of the Indians by their chiefs, in violation of law and the said treaty stipulations; and that the said Hugh Tyler was allowed to deduct from the said payments, (both from the "traders" and "half breeds,") a very large per centage on the amounts paid to them, to the prejudice of the just rights of the Indians, and to the manifest injustice of such of the "traders" and "half breeds" as had not consented or agreed to that arrangement.

6th. With having failed to reserve a sufficiency of money for the removal and subsistence of the See-see-toan and Wah-pa-toan bands of Sioux Indians, for the first year after their removal, according to the provisions of the treaty of Traverse des Sioux, of July, 1851.

And 7th. With having procured "*receipts*" from the Indians for the money paid to the "traders" and "half breeds," to be used as vouchers in the settlement of his accounts at the Treasury Department, by the removal of some of the recognized chiefs, and the appointment and substitution of others, not recognized by the Indians; and by procuring the signatures of unauthorized persons, who were not chiefs, in some instances, and of the recognized chiefs, by fraudulent and improper means, in others.

And 1st. He is charged with having confederated or co-operated with Henry H. Sibley, Hercules L. Dousman, Charles W. Borup, Joseph R. Brown, Franklin Steele, Hugh Tyler, Charles D. Fillmore, and others, for the purpose of absorbing the whole fund intended for the Sioux Indians under the treaties of July and August, 1851, by payments to favorite claimants or traders, to the exclusion of meritorious creditors, who were not permitted to share in the said distribution.

The "*funds*" here mentioned have reference to the sum of \$275,000 to be paid to the See-see-toan and Wah-pa-toan, or upper bands of Sioux Indians, by the *first* clause of the *fourth* article of the treaty of "*Traverse des Sioux*" of July 23, 1851; and the sum of \$220,000, to be paid to the Med-a-wa-kan-toan and Wah-pa-coo-ta, or *lower* bands of Sioux Indians, by the *first* clause of the *fourth* article of the treaty of "*Mendota*" of August 5, 1851; for the purpose, in both instances, of enabling these Indians "to settle their affairs, to comply with their present just engagements, and in consideration of their removing themselves to the country set apart for them, (by these treaties,) and subsisting themselves the first year after their removal."

These funds were called by the Indians their "*hand-money*," as contradistinguished from their "annuity money" and other sums provided for, under other and different clauses of these treaties; and hence the frequent application of this term ("*hand-money*") to that class of funds in the testimony of the witnesses.

Both treaties alike provided that these particular funds should be paid to the chiefs of the nation, or of the appropriate "bands," *in such manner as they thereafter, in "open council,"* should "request."

It is not to be denied but that the persons referred to as the "confederates" of Governor Ramsey, or the most of them, rendered the commissioners (Luke Lea and Governor Ramsey) essential aid in the negotiation of these treaties with the Indians; and it is even represented, by the Hon. Luke Lea, in his testimony, that no treaties could have been made at all, with these Indians, without their concurrence and active co-operation.

It is equally evident that there was an understanding between the commissioners and the traders; that the claims of the latter against the Indians were, in consideration of these services, to be provided for and paid. These facts are fully established by the testimony.

We have, nevertheless, taken the written provisions of the treaties as finally ratified by the contracting parties for our guidance, and have not allowed the respondent to go behind them for explanations, or to produce testimony to show that they were intended to mean anything different from what a fair construction of their language would legitimately import.

This rule, however, was not applied to what is called the "*Traders' Paper*;" an instrument of writing purporting to have been signed by the chiefs, soldiers, and braves of the See-see-toan and Wah-pa-toan bands, at "Traverse des Sioux," on the 23d day of July, 1851, (the day the treaty was signed,) and which provided for the payment of the \$275,000, mentioned in the *fourth* article of that treaty, or the greater part of it, to their "traders" and "half-blood" relations.

In regard to this paper, of which much has been said by the witnesses, full latitude has been allowed to the respondent, to show any acknowledgment of indebtedness or agreement, on the part of the Indians, to pay this money to the traders, irrespective of time or place, or of the validity of such a paper, under any circumstances whatever.

The Indians, stimulated by the traders, had, at the making of the treaty, insisted upon a provision for a very large fund, to enable them to pay their debts, and to provide for their "half-breed" relatives. Large sums were provided; and it now became a question how this money should be distributed and disposed of among the claimants. Many of the witnesses were examined in reference to acknowledgments of indebtedness, made by the Indians to the traders, in connexion with this "*Traders' Paper*," prior to its execution, on the 23d of July, 1851, and much larger amounts proved to have been admitted by them than was afterwards received by the traders.

The same remark applies also to the Med-a-wa-kan-toan bands—who also admitted just before, and at the time of the making of the treaty, a large indebtedness to their traders. Mr. Bailey says that they admitted an indebtedness, at one time, of \$119,000, and \$149,000 at another, and stated that they wanted \$90,000 set apart by the commissioners to pay their just obligations. Their acknowledgments, in this respect, are also proved by other witnesses. But it is due to justice that we should say that it was also proved, and by the same witnesses, that these Indians, as a general rule, (a rule perhaps applica-

ble to all, without exception,) were wholly incapable of investigating the large amounts of accounts presented against them by the claimants, and were, after all, governed or influenced in making these admissions or acknowledgments of indebtedness, *entirely* by the statements and representations of the traders.

Henry H. Sibley, the largest of their creditors, says, in reply to a question on this subject, "I do not think that they are capable of investigating and determining upon the correctness of large amounts of money or accounts; but I think that they have a general idea of the amount of capital stock employed in the trade; and would know that they were indebted to those having a large capital, more than to small traders."

He says further, when speaking of their acknowledgments of indebtedness to the traders, that they did not name any particular sum, for the reason, that there were different traders for the different bands, and that it was impossible for them to ascertain the amount of their collective indebtedness; and that the amount they spoke of, and which was subsequently incorporated into the treaty for the payment of their debts, removal, and subsistence, *was suggested to them by others*; and Joseph R. Brown, when speaking of the acknowledgment of the Indians on a certain occasion, when they admitted an indebtedness of \$300,000 to their traders, said, that he presumed they had arrived at that amount, "*from what they had learned from the traders themselves.*" Alexis Bailey answers in reference to this matter as follows:

Question. "From your knowledge of the Indians, are they capable of settling their accounts, for such large amounts?"

Answer. "They are not capable of looking into these matters, where large amounts are involved."

Question. "Did the Indians express the desire to have some white persons to look into their accounts, and to see what was due to the traders?"

Answer. "They did express such a desire."

Such is the testimony of all the witnesses, with but few, if any, exceptions. And when it is recollected, that some of these accounts extended back in date to periods of more than thirty years ago, common justice would seem to have demanded, if it was proper at all for Governor Ramsey to have interposed between the Indians and their creditors, that he should, notwithstanding these admissions of indebtedness, have required a production of the original books and accounts on the part of the traders, with satisfactory evidence in corroboration of their own affidavits, of the correctness of their charges. For it seems to have been the policy of our intercourse laws with the Indians to treat them as *wards* under the *guardianship* of the government, and in that respect to consider them as incapable of making contracts of a binding character with their white traders; and hence the propriety of the exercise of a protection like that, and especially when applied to past transactions of such long standing, where from their very nature, in respect to time and circumstances, the Indians now living must have had a very imperfect knowledge of them, and in many instances, no knowledge whatever.

Governor Ramsey, in justifying his payment of this See-see-toan and

Wah-pa-toan money to the traders, upon the authority of this "Traders' Paper," says, in his official letter to the Hon. Luke Lea, Commissioner of Indian Affairs, dated St. Paul, March 2, 1853, as follows: On examining the document submitted to me, by Mr. Tyler, I discovered, that while not a power of attorney, it was a most *solemn acknowledgment*, made by the chiefs in "open council," of their indebtedness to certain individuals, pledging the faith of their tribe for payment, and requesting, in the words of the treaty, that the United States would pay the individuals named the sums acknowledged to be respectively due to them. The aggregate of the sum they desired to be paid was \$210,000; and they set apart likewise \$40,000 for distribution among their "half-breeds;" while 25,000 was reserved, "to remove and subsist themselves for one year;" a sum amply sufficient, as all but one small band lived already on the "reserve" set apart for them. The document was signed by all the chiefs and headmen, who signed the treaty of Traverse des Sioux, was properly witnessed by a number of respectable citizens, and by the general government interpreter on that occasion, not one of which witnesses, up to this time, has ever alleged to me anything against its entire validity.

But is this a true exposition of that paper, as explained by the evidence? Was it presented to the Indians as a *whole*, and was it explained to them in "open council," at the time they signed it, as is supposed by Governor Ramsey? The witnesses say not. That it was not explained to the Indians in "open council" at the time; that most of them were ignorant of its contents, and that the schedule of the traders' names, with the amounts to be paid to each, and to the "half-breeds," (an important part of the instrument) was not attached to it at all, when it was signed by them, and attested by the by-standers. The official certificate of Nathaniel McLean, at that time the agent of the Sioux Indians, is also attached to this paper, for the purpose of giving authenticity to the transaction. In regard to which Mr. McLean, states in his testimony, as follows: "my certificate (dated at Traverse des Sioux, July 23, 1851,) is attached to the schedule annexed to the paper signed by the Indians, but when I put my certificate to it, I did not see any schedule of creditors' names and amounts, nor was there any, when the Indians signed it, that I saw. I should have seen it, if it had been attached to the same paper which was signed by the Indians. I never saw the schedule until near six months afterwards." And yet Mr. McLean's certificate appears now attached to it, and in such a way, as to authenticate the signing of the schedule by the Indians, as well as the main body of the instrument. Mr. McLean further says, in relation to this certificate, that a certificate had been drawn up by some one (I do not know by whom) for me to sign. I examined it, and said, that it was not exactly in accordance with the facts. The certificate went on to say, "*that the paper was explained to the Indians*, and I could not sign it." Before I did sign it, I had a conversation with Luke Lea, and afterwards with Gov. Ramsey, and I said to Gov. Ramsey, that the "paper" had not been explained to the Indians in my presence, and stated my embarrassment in signing a general certificate of that kind. That if I signed it, I would have to say, "that it was not explained to the Indians in my presence." This conversation

took place with Governor Ramsey at Mendota. Governor Ramsey replied, that my objection was correct, and that it would be proper to make the certificate, in the form in which it is made.

He also remarks, that when the Indians were signing this "paper," he asked Joseph R. Brown, (who appeared to have the charge of it for the traders,) if it was not to be read and explained to them before they signed it; to which he replied, that it had been attended to before. Mr. Brown further says, by way of explanation of his testimony, that with the exception of the *schedule* of the "traders' names and "half breeds," the paper as written, was explained to the chiefs and principal men at Ta-ka-ra lodge, not more than half an hour before the Indians were called to "council" to sign the treaty; and that it was in the same lodge, and in the same council, where they assented to the *ultimatum* of the commissioners.

We have thus noticed the evidence of Joseph R. Brown, as the strongest given on the part of the respondent, in reference to the explanation of this paper. It does not show that it was read and explained to the Indians in the "open council" in which it was signed by them; but on the contrary that it was not. How then could the Indians know that this was the *same* paper which was read and explained to them at a different time and at a different place? Doctor Thomas S. Williamson, a missionary to the Indians from the Presbyterian church, who has resided among them for the last eighteen years and speaks their language, says in his testimony, that the Indians had all signed this "paper," before he put his name to it, as a witness—that the schedule of the traders' names was not then attached to it; that he thought it was a copy of the treaty, when the Indians were signing it; that some of the Indians who signed the treaty, told him that they did not know what they had been signing. That it was not explained to them in his presence, or when they signed it; although he was afterwards informed, that it been explained to them elsewhere. Henry H. Sibley, when asked the question upon his cross-examination, "was the 'traders paper,' (so called,) explained to the Indians in 'open council,' when they signed it," answers emphatically, "it was not."

Hanok, an educated Sioux Indian, says, that he was educated near Cincinnati, Ohio, and can read and write English—that he was present at the making of the treaty at "Traverse des Sioux, in July, 1851, and signed both the treaty and the "Traders' Paper," with the other Indians—that the "Traders' Paper" was not explained to them, and that he did not know what it was about—and that he would not have signed it, if he had known what it contained. It is very evident, therefore, from all the testimony taken together, that a very few of the chiefs and head men, if any, understood the nature and object of this instrument at the time they signed it, whatever may have been said in regard to it previously. Joseph R. Brown thinks that Wah-min-day-ne-chah, or the Orphan, and Ish-tah-hum-bah, or Sleepy Eyes, who are two of the old chiefs, expressed their satisfaction at the signing of the "Traders' Paper," on the same day on which it was signed, and hoped that the traders would now sell their goods to them on more reasonable terms. There was also the testimony of Mr. Sibley, and some others to the

same effect, in regard to the admissions of some of these Indians after the execution of that "paper;" but the preponderance of the testimony in that respect, as to the majority of the chiefs, is greatly the other way.

The treaty provides, that this money shall be paid to the chiefs in such manner, as they *thereafter* in "open council" shall direct. Meaning evidently, *after* the treaty should be ratified—for until then, it is no treaty, and anything done under it, would be premature, and not comprehended within its meaning and operation. But we will show hereafter, that, even if this instrument had been executed in all respects as represented by Governor Ramsey in his letter to the commissioner, he was still not warranted under the circumstances in paying over the money upon any authority derived from it.

That the whole of the funds stipulated to be paid under the *fourth* articles of the treaties of July and August, 1851, were absorbed by *favorites*, to the exclusion of *meritorious creditors*, we are not prepared to say. For although it is true that a very small number of these traders had the principal management and direction in the distribution of these funds among themselves, and the other traders and half breeds, and, did in some way or other, eventually, receive the greater part of the money, still they may (with a few exceptions) have been entitled to it justly, if all the facts and circumstances had been known and understood by the witnesses.

Among the meritorious claims omitted, are those of James Wells, and Mrs. Hooe, the legal representative of Mr. Rolette, deceased, formerly an Indian trader at "Prairie du Chien." As to the *first*, Mr. Sibley says, that it was omitted by mistake, and that he afterwards paid him his *pro rata* allowance, out of his own funds, because of its omission through his own neglect; and that Mrs. Hooe presented no claim for allowance by the committee.

In regard to these exceptions, for instance, Alexis Bailey says in his testimony, when speaking of the schedule to the "Traders' Paper," that some claims upon that list were very excessive; others unjust; and some again where the claimants did not get their just dues. He says especially in regard to Hercules L. Dousman's claim, that it was not on the schedule when the "traders' committee" had reported it as complete; but that when he saw the list afterwards at Mendota, Mr. Dousman's name was also upon it, in connexion with his own, and he thinks in Dousman's own hand writing, although he said that Mr. Dousman was not now, nor never had been, in partnership with him. And in answer to another question propounded by Governor Ramsey's counsel, in relation to the fairness of the distribution as made by the "traders' committee," he replies emphatically: "I answer, that it was not a fair distribution." Others of the witnesses testify, that the distribution among the claimants was as fair and equitable as it could have been made under all the circumstances. That there was some inequality in the distribution as made is unquestionable; but we think that the greater part of this inequality, and consequent injustice to some of the claimants, must have arisen from the omission to require the traders to produce and substantiate their accounts against the Indians respectively, by competent and satisfactory testimony.

2. Governor Ramsey is next charged with having received \$593,050,

in the "national currency," for disbursement to the Sioux Indians, under the provisions of said treaties, and with having deposited the same in one or more banks in the city of New York, in violation of the laws of the United States; and also with having exchanged the greater part of the gold coin thus deposited for bank notes and drafts, contrary to law and the instructions of the Indian Department.

The evidence shows that Governor Ramsey received a draft for the Treasury Department on the Assistant Treasurer at New York, No. 3808, and dated October 5, 1852, for \$593,050, for disbursement according to the stipulations contained in the *fourth* articles of the treaties concluded with the Sioux Indians at Traverse des Sioux and Mendota, on the 23d of July and 5th of August, 1851, and the act of Congress making appropriations; that he went from Washington city to the city of New York, and there made a deposit of gold coin (the avails of said draft) with the Merchants Bank of New York, of the sum of \$583,050; and that the funds thus deposited were stated by Governor Ramsey, in the presence of the cashier, to be for Indian payments, when the deposit was made. The cashier further testifies, that of this sum \$100,000 was subsequently drawn out in gold coin; \$100,000 in bank notes, (\$60,000 of which were on the Merchants Bank, and \$40,000 on other banks in New York,) and that the residue of the deposit was paid out on drafts to various individuals, a large number of which were drawn by Governor Ramsey in favor of Hugh Tyler, after his return to the Minnesota Territory.

The cashier of the Merchants Bank also says in his testimony, that he had reason to believe that a deposit of \$150,000 was also made by Governor Ramsey, about the same time, with the Bank of Commerce in that city. This latter amount, it would seem, must have been a portion of the sum originally deposited with the Merchants Bank, and subsequently withdrawn and deposited in the Bank of Commerce, but for what purpose is not shown by the testimony—nor is the discrepancy of \$10,000 between the amount of the treasury draft of \$593,050, and the amount deposited with the Merchants Bank of \$583,050, accounted for.

It appears, therefore, that of this large amount of money confided to his custody for Indian disbursements, as aforesaid, only \$100,000 was taken by him to the Minnesota Territory in gold coin, \$100,000 in bank notes, and that the residue was paid out to the claimants chiefly in drafts, and for the greater part on the Merchants Bank of New York.

That such exchanges of the national currency are contrary to law and the instructions of the Indian Department will be seen by a reference to the following extract from the "circular to the disbursing officers and agents in the service of the Indian Department," to be found at page 73 of the printed office copy of the laws, regulations, &c., of the Indian Bureau of 1850, to wit:

WAR DEPARTMENT,
Office Indian Affairs, August 20, 1846.

SIR: The annexed 20th and 21st sections of the act of the 6th instant, for the "better organization of the treasury, &c.," are herewith transmitted for your information and strict observance.

Very respectfully, your obedient servant.

SECTION 20. *And be it further enacted*, That no exchange of funds shall be made by any disbursing officers or agents of the government, of any grade or denomination whatsoever, or connected with any branch of the public service, other than an exchange for gold or silver, and every such disbursing officer, when the means for his disbursements are furnished to him in gold and silver, shall make his payments in the money so furnished; or when those means are furnished to him in drafts, shall cause those drafts to be presented at their place of payment, and properly paid according to the law; and shall make his payments in the money so received for the drafts furnished; unless in either case he can exchange the means in his hands for gold and silver at par; and it shall be, and is hereby, made the duty of the head of the proper department immediately to supersede from duty any disbursing officer who shall violate the provisions of this section, and forthwith to report the name of the officer or agent to the President, with the fact of the violation, and all the circumstances accompanying the same, and within the knowledge of the said secretary, to the end that such officer or agent may be promptly removed from office or restored to his trust and the performance of his duties, as to the President may seem just and proper.

The penalty for a violation of this section of the law, (the 20th section,) as above specified in the instructions of the Indian Department, involves only the question of removal from office; and, as Governor Ramsey is already out of office, no further notice of that part of the law seems to be necessary.

3. He is next charged with having paid accounts against the United States, officially, as superintendent of Indian affairs, on contracts for supplying the Indians with provisions, goods, &c., in *bank notes and drafts* instead of the *gold coin*, which was originally received by him for that purpose.

So far as the examination extended, in relation to this charge, it was ascertained that the accounts on contracts for supplying the Indians with provisions, goods, ammunition, &c., during the fall and early part of the winter of 1852, were generally paid in drafts and bank notes, with the exception of very small amounts which were sometimes paid in gold in order to make the change, and this remark will most probably apply to all such contracts as are stated in Senate Ex. Doc. No. 29, Part II, 2d Sess. 32d Congress; although the evidence does not embrace *all* the accounts to be found in that document. Enough, however, was shown to satisfy us that this class of contracts had, for the most part, been paid in the manner stated.

The 16th section of the act of Congress of August 6, 1846, provides as follows:

SEC. 16. *And be it further enacted*, That all officers and other persons

charged by this act, or any other act, with the safe-keeping, transfer, and disbursement of the public moneys, other than those connected with the Post Office Department, are hereby required to keep an accurate entry of each sum received, and of each payment or transfer; and that if any one of the said officers, or of those connected with the Post Office Department, shall convert to his own use, in any way whatever, or shall use, by way of investment in any kind of property or merchandize, or shall loan, with or without interest, or shall deposit in any bank, or shall exchange for other funds, except as allowed by this act, any portion of the public moneys intrusted to him for safekeeping, disbursement, transfer, or for any other purpose, every such act shall be deemed and adjudged to be an embezzlement of so much of the said moneys as shall be thus taken, converted, invested, used, loaned, deposited, or exchanged, which is hereby declared to be a felony; and any failure to pay over or to produce the public moneys intrusted to such person, shall be held and taken to be *prima facie* evidence of such embezzlement; and if any officer charged with the disbursements of public moneys shall accept or receive, or transmit to the Treasury Department, to be allowed in his favor, any receipt or voucher from a creditor of the United States, without having paid to such creditor, in such funds as the said officer may have received for disbursement, or such other funds as he may be authorized by this act to take in exchange, the full amount specified in such receipt or voucher, every such act shall be deemed to be a conversion, by such officer to his own use, of the amount specified in such receipt or voucher; and any officer or agent of the United States, and all persons advising or participating in such act, being convicted thereof, before any court of the United States, of competent jurisdiction, shall be sentenced to imprisonment for a term of not less than six months nor more than ten years, and to a fine equal to the amount of the money embezzled, &c.

Whether, in these transactions, Governor Ramsey has violated this section of the act of August 6, 1846, or not, and has thereby incurred its penalties, we do not consider ourselves as called upon to express an opinion, but will leave that matter for the consideration of the Senate.

4. He is charged with having refused to pay to the Sioux Indians the money intended for them under the *fourth* articles of the treaties of July and August, 1851, although repeatedly and earnestly requested so to do by the chiefs; with having resorted to threats and force, and other acts of cruelty and oppression, to overawe and intimidate, and thereby to compel them to consent to the payment of this money to the "traders;" and with having in the end paid over the greater part of said money to one Hugh Tyler for payment or distribution to the "traders" and "half-breeds," contrary to the wishes and remonstrances of the Indians, in violation of the law and the stipulations contained in said treaties, and also in violation of his own solemn pledges previously made to them in regard to said payments.

The money here mentioned has reference to the sum of \$275,000, which was stipulated to be paid by the *first* clause of the *fourth* article of the treaty of Traverse des Sioux, of July 23, 1851, with the See-se-ton and Wah-pa-ton bands of upper Sioux; and the sum of \$220,000,

in the corresponding clause and article of the treaty of Mendota of the 5th of August, 1851, with the Med-a-wah-kan-ton and Wah-pa-coo-ta bands of lower Sioux Indians—making, together, the sum of \$495,000.

The *first* clause of the *fourth* article of the treaty of July 23, 1851, reads as follows:

“To the chiefs of the said bands, to enable them to settle their affairs, and comply with their present just engagements; and in consideration of their removing themselves to the country set apart for them as above—which they agree to do within two years, or sooner, if required by the President, without further cost or expense to the United States—and in consideration of their subsisting themselves the first year after their removal—which they agree to do without further cost or expense on the part of the United States—the sum of two hundred and seventy-five thousand dollars, (\$275,000:) *Provided*, That said sums shall be paid to the chiefs in such manner as they, hereafter, in open council shall request, and as soon after the removal of said Indians to the home set apart for them as the necessary appropriation therefor shall be made by Congress.”

And the first clause of the *fourth* article of the treaty of the 5th of August, 1851, reads as follows:

“To the chiefs of the said bands, to enable them to settle their affairs and comply with their present just engagements; and in consideration of their removing themselves to the country set apart for them as above, (which they agree to do within one year after the ratification of this treaty, without further cost or expense to the United States,) and in consideration of their subsisting themselves the first year after their removal, (which they agree to do without further cost or expense on the part of the United States,) the sum of two hundred and twenty thousand dollars, (\$220,000:) *Provided*, That said sum shall be paid, one half to the chiefs of the Med-a-wah-kan-toan band, and one half to the chief and headmen of the Wah-pa-coo-ta band, in such manner as they, hereafter, in open council, shall respectively request, and as soon after the removal of said Indians to the home set apart for them, as the necessary appropriations therefor shall be made by Congress.”

The act of Congress making the appropriations for the fulfilment of these treaty stipulations reads as follows:

“For fulfilling treaties with the Sioux of the Mississippi, to wit: for payment of the chiefs of the See-see-toan and Wah-pa-toan bands of Dakota or Sioux Indians, to enable them to settle their affairs, and to comply with their present just engagements; for expenses of removal of the said bands from the lands ceded, and for subsistence of themselves for one year thereafter, per *first* clause of the *fourth* article of the treaty of the 23d of July, 1851, ratified by the Senate of the United States on the 23d of June, 1852, two hundred and seventy-five thousand dollars,” (\$275,000;) and “For payment to the chiefs of the Med-a-wah-kan-toan and Wah-pa-coo-ta bands of Dakota or Sioux Indians, to enable them to settle their affairs, and to comply with their present just engagements; for expenses of removal of said Indians from the lands ceded, and for subsistence for themselves for one year thereafter, per *first* clause of the *fourth* article of the treaty of the 5th of Au-

gust, 1851, ratified by the Senate of the United States the 23d of June, 1852, two hundred and twenty thousand dollars." (\$220,000.)

The *third* section of the said act of Congress further provides "That no part of the appropriations herein made, or that may hereafter be made, for the benefit of any Indian or tribe, or part of a tribe of Indians, shall be paid to any attorney or agent of such Indian, or tribe, or part of a tribe, but shall in every case be paid directly to the Indian or Indians themselves to whom it shall be due, or to the tribe, or part of a tribe, *per capita*, unless the imperious interest of the Indian or Indians, or some treaty stipulation, shall require the payment to be made otherwise, under the direction of the President." See pages 51, 52, and 56, acts of 1851, 1852, *Thirty-second Congress*.

Both treaties provide that these sums of money shall be paid to the chiefs, "*in such manner as they, hereafter, in open council, shall request.*"

Whatever may have been the intention of the Indians in regard to the payment of this money to the traders prior to the ratification of the treaties, they seemed to have determined (with the exception of the Wah-pa-coo-ta band) subsequently to demand the whole of it to be paid *into their own hands* in the first instance; and with that view made formal requests of Governor Ramsay in "open council" by their chiefs, and protested against its payment to the traders. It appears that "Red Iron" was the principal speaker in making the demand for the See-se-toan and Wah-pa-toan bands, and Wah-ba-shaw for the Med-a-wa-kan-toan or *lower* Sioux. In addressing Governor Ramsay, "Red Iron" remarked: "I am authorized by all the See-se-toan and Wah-pa-toan bands to speak for them, and to demand that this money be paid *into our own hands.*"

A demand on the part of the *upper* bands was also made by Et-wah-ke-an, or Limping Devil, who said, in relation to their supposed indebtedness to the traders, "My father died thirty years ago, and I do not recollect that my people have had any traders since. I do not wish to pay the debts of those whose bones have been crumbling in the dust since that time. I was away off on the plains with one hundred and fifty 'tee-pees' or 'lodges' of my people; and when we caught furs we bought powder from other Indians, and when a trader would come along, we bought cloth and blankets."

The requests of Red Iron and Wa-ba-shaw, for the respective bands represented by them, were repeated explicitly in "open council," and more than once, and were as often met by a refusal on the part of Governor Ramsay, on each occasion. He placed his refusal upon the ground that they were indebted to, and had agreed to pay their traders; and that it was his duty to pay the money to them, and not to the Indians,

Alexander J. Campbell, who was at the payment of the "*annuities*," at "Traverse des Sioux," in the "*fall*" of 1852, testifies, "that he heard the chiefs, Red Iron and others, demand their money from Governor Ramsey two or three times, and that he told them he would not pay it to them, but that they must pay their honest debts. Red Iron asked him if that was the direction of the "great father" at Washington; to which he replied: "I am here as the representative of the 'great father' myself." The Indians remarked, that they were

willing to pay their honest debts, but wanted him to make the traders first exhibit their accounts. To which the governor replied, that he had no business to do that, as they had already given the traders a "*paper*" to pay their debts.

He further says, "that he is now twenty-six years old, and was born and raised among the Indians, and that he is well acquainted with the chiefs of the upper See-see-toan and Wah-pa-toan bands. That the Wah-pa-toan chiefs are, 1. E-yang-mo-nee, or Running Walker; 2. O-pee-en-dah, or Big Curly Head; 3. Wah-nok-soon-ta, or the Little Rapids Chief; and that the See-see-toan chiefs are, 1. Wah-min-da-ne-chah, or the Orphan; 2. E-tah-wah-ke-an, or Limping Devil; 3. Ish-tah-hum-bah, or Sleepy Eyes; and 4. Mah-zah-shah, or Red Iron, making *seven* in all; and that these were the *seven* See-see-toan and Wah-pa-toan chiefs at the treaty of 'Traverse des Sioux' in July, 1851. That he does not know O-tah-e-tah and No-hope-ton as chiefs, and that they are not recognized by the Indians as such."

Xavier Fresnier was also present at "Traverse des Sioux" and heard "Red Iron" and the other chiefs demand this money in all their "councils." They stated to Governor Ramsey that they wanted all the money paid *into their own hands*; that they would then give some to the "traders," some to the "half-breeds," and keep a part for themselves.

According to the testimony of Warren Woodberry, Governor Ramsey replied to Wa-ba-shaw, when he demanded payment for the Med-a-wa-kan-toan bands at Mendota, or the St. Peter's agency, "that if the Indians would come to some agreement concerning the payment of their honest engagements, he was then ready to make the payment; but if they would not, and insisted to have the money paid *into their own hands*, he would not pay it to them at all. He told them further, that time was advancing, and it was getting late, and that they had better consult with each other and come to some conclusion." The Indians then said that they wanted the money paid into their own hands; that they had been detained a long time; were in a state of starvation, and wished to go home. That if they could not receive it into their own hands, according to the stipulations of the treaty, and pay it out in "council," as they wished to do, they wanted to go home. Governor Ramsey, then told the interpreter to say to them, that if they could not agree upon some terms about the payment of the money, he would submit a proposition to them, which was this: \$70,000 to pay their old debts, \$20,000 for their "half-breed" relations, and \$20,000 to be reserved for their removal and subsistence; and that the money for their "half-breeds" could then be paid out by them in "council" as they might think proper. Wa-ba-shaw then arose from his seat and said: "You have gotten our lands, and now we want the money for them, as was agreed upon; or you can keep your money, and we will keep our lands, and go home." Governor Ramsey remarked, that if they did not comply with his wishes in regard to the payment that he would send or take the money back to their "great father" at Washington. To which Wa-ba-shaw replied: "Take it back to the 'great father' and we will take back our land."

Henry H. Sibley says that he was present at Mendota when a similar request was made by the chiefs of the Med-a-wah-kan-toan bands, to which Governor Ramsey replied: "that the money set apart for their debts would not be paid to them under any circumstances unless they made some arrangement in regard to its disposition, without his specifying any particular mode. He stated that he was not authorized by his instructions to pay directly into the hands of the Indians the sum of money which had been set apart for specific purposes. That if they could not arrange among themselves, in reference to a proper disposition of it, he would either send the money back, or await further orders from the government."

Alexis Bailey, an old trader among the Indians, and formerly connected in trade with the "American Fur Company," says, that the Med-a-wah-kan-toan chiefs not only asked Governor Ramsey for their "*hand money*," but for all the money coming to them under the treaty of the 5th of August, 1851, the "*traders' money*" inclusive. That Governor Ramsey replied, that a certain sum had been set apart for specific purposes, and that he could not divert it; that their "great father" expected them to pay their debts. Upon being asked the question by Governor Ramsey's counsel, "Were some of the chiefs for paying their debts and some not?" he answered: "All were for paying their just debts; but they were for having the money first paid into their own hands, and then to pay their debts themselves, as they thought just and proper."

Nathaniel McLean, at that time the agent for the Sioux Indians, when interrogated as to what Governor Ramsey said in his presence to the chiefs when they asked him for this money, replies, that Governor Ramsey said to them, that he liked to deal with honest men; that white men paid their honest debts, and that he wanted the Indians to do so likewise. The Indians then asked the governor what he thought would be right for them to pay. He said, he thought seventy thousand dollars. The chiefs said, that it was too much, and refused to pay it. Governor Ramsey then said, that if they would not pay their honest debts, that he would take or send the money back to their "great father" at Washington. Wa-ba-shaw then replied: "Take it back, and we will take back our land;" and the Indians then broke up the "council" in confusion.

Other such conferences, in substance, will be found in the testimony, both in regard to the *upper* and *lower* bands, which need not be repeated in this report. Enough has been stated to show the nature of the difficulty in this respect, and how, and why it was, that Governor Ramsey refused to comply with the request of the Indians.

The chiefs and headmen of See-see-toan and Wah-pa-toan bands also presented a written "*protest*," (though not signed by them,) to Governor Ramsey, dated at Traverse des Sioux, December 2, 1852, against the payment of this money to the traders. They admitted an indebtedness to their licensed traders, and a willingness to pay what was just, but repudiated the "*Traders' Paper*," which had been signed by them, on the 23d of July, 1851, as fraudulent; and requested a suspension of the payments, until the accounts of the claimants were

first examined and adjudicated by competent and disinterested commissioners.

This "*protest*," was the result of a "council" of the chiefs held at Mr. Sweetser's store in Traverse des Sioux—it was written by Mr. Sweetser—it was read and explained to the Indians by their agent, Nathaniel McLean—interpreted by Alexander J. Campbell, and Duncan Campbell; and afterwards delivered to Governor Ramsey in person, by the chief Red Iron, just as he (the governor) was about leaving Traverse des Sioux for St. Paul; but before the payment of this money to the "traders" and "half breeds," subsequently at Mendota.

A copy of this "*protest*," will be found in the evidence.

He is also charged with having resorted to threats and force and other acts of cruelty and oppression, to overawe and intimidate the Indians, and thereby to compel them to consent to the payment of this money to the traders.

We have no doubt from the evidence, as well as from our own knowledge of the character of Governor Ramsey, that his general conduct towards the Indians was kind and humane. But difficulty had arisen about the payment of this money, and that kind of treatment which he might have thought justifiable, and even proper under the circumstances, may have been regarded very differently by others, having no such objects to accomplish. When interrogated in regard to the general conduct of Governor Ramsey towards the Indians, Nathaniel McLean, (the agent,) replies: "In my judgment, his general management of the Indians was good. *Prior to this difficulty about these matters*, I heard of no complaint."

And such, we have no doubt, was the fact.

One of the acts of cruelty and oppression, as mentioned in the charge, must have had reference to his difficulty with "Red Iron," and his subsequent treatment of that chief. As soon as it was announced that Governor Ramsey had returned with the money, and was ready to commence the payments, Red Iron and his band of warriors, who resided at "Traverse des Sioux," where the payment of the See-see-toan and Wah-pa-toan money, amounting to \$275,000, was expected to be made, having been actively stimulated by an influence adverse to the interests of the traders, seem to have determined to prevent Governor Ramsey, if possible, from making any arrangements with the Indians, by which this money could be legally paid otherwise than into their own hands.

As the business for making out the "*rolls*" of the names of the Indians who were entitled to "annuities," and the payment of the "annuities" after the "*rolls*" were completed, appears to have properly belonged to the office of Nathaniel McLean, who was at that time the agent of the Sioux Indians, the reasonable inference would be, that other business than that had taken him (Governor Ramsey) from St. Paul to "Traverse des Sioux," and that this other business had reference to the \$275,000, rather than to the payment of the "annuities." For, in relation to the latter, he had only to pay over the money to Mr. McLean—take his receipt for it—and there ended his responsibility and his duty, in regard to that whole matter.

Governor Ramsey having refused to pay the money to the Indians,

as requested by the chiefs of the *upper* bands, "Red Iron" and his warriors proceeded to establish what is called a "soldier's lodge."

The object of this "soldier's lodge" appears to have been to prevent all intercourse between the Indians assembled at "Traverse des Sioux" and Governor Ramsey, in relation to any negotiation or arrangement concerning the money claimed by the traders, by virtue of the "Trader's Paper," and to use force, if necessary, *towards the other Indians*, if any should attempt to violate this non-intercourse edict. Red Iron himself explained, "that his object was to prevent individual chiefs and young men from going singly, and *at night*, and *alone*, to the white men's camps, and there signing papers and disposing of their money *secretly*, as had been the case with the Med-a-wah-kan-toan bands. That he wanted *all* the chiefs to go into 'open council' together, so that all might know what had been done. That he had been informed that several new chiefs had been made at the time they signed the amendments to the treaty," &c. (September 8, 1852.)

Henry H. Sibley says, "that the object of the 'soldier's lodge' is to effect certain objects with the 'bands' coming from abroad; that the Sioux Indians recognize the right of the 'band' living on the land to which they come to erect a 'soldier's lodge,' and submit to the regulations prescribed by it. That it controls the movements of the whole band, without regard to the authority of the chiefs."

Joseph R. Brown, who has also had much experience with these Indians, says that "its object is to regulate the movements and policy of the encampment, and that it is the supreme power of the encampment, according to a custom with the Sioux Indians." He further says, "that Red Iron's band of See-see-toan Indians did not disguise their determination to prevent any intercourse between the *upper* Sioux Indians,—or those opposed to their policy,—and the government officers, unless it was done under their control." "Then," continues Mr. Brown, "commenced a very evil and turbulent spirit, and that in all his experience he has never known so much discord and ill-feeling in a camp of Sioux Indians." "And all this (he says) was produced by different views, entertained by different bands of Indians, relative to the disbursement of the \$275,000 under the treaty." Mr. Sibley also says, "that his conduct was outrageous, and that he advised Governor Ramsey to order his arrest."

Captain James Monroe, of the United States army, was then sent for by Governor Ramsey, and immediately came with a company of U. S. infantry and five dragoons, and by prompt and judicious conduct succeeded in destroying the "soldier's lodge," in making Red Iron a prisoner, and in restoring order and quiet to the encampment, *without bloodshed*.

Governor Ramsey then summoned "Red Iron" into his presence, and after stating to him the catalogue of his offences, concluded by depriving him of his chieftainship, saying: "*You are broken as a chief, and I now break you*; and this officer (pointing to Captain Monroe) will keep you a prisoner." Captain Monroe further testifies, "that he immediately confined Red Iron in a room, and placed a sentinel over him; that he was released on the following day—and in the mean time, he

was treated with as much lenity, during his confinement, as was consistent with secure keeping.

It is now respectfully submitted in regard to this transaction, whether it be cruel treatment or not? The conduct of Red Iron and his soldiers was certainly very reprehensible and unjustifiable under any circumstances. But as his conduct seems to have resulted from the refusal of Governor Ramsey to pay this money to the Indians and from an apprehension that some secret arrangement was intended, by which it was to be paid to the traders, and as no violence was directed towards any white man, is there not some excuse for an untutored savage, and especially if his conduct had been influenced by evil councils elsewhere? If Governor Ramsey was right in withholding this money from the Indians under the circumstances, then he is not only excusable, but perhaps justifiable; but if otherwise, then the case is very different. These considerations are suggested for the purpose of directing attention to the propriety of observing our treaty stipulations with the Indians faithfully and justly; and the more so, for the reason that they are helpless and dependant, and being ignorant of our language, are compelled to rely exclusively upon our justice and humanity for proper explanations of their treaties with us in the first place, and for a faithful fulfilment afterwards of our stipulations and engagements growing out of them.

It is a fact not to be denied, that Governor Ramsey experienced great difficulty in procuring the receipt from the See-see-toan and Wah-pa-toan chiefs for the \$250,000, (part of the \$275,000,) mentioned in the *first* clause of the *fourth* article of the treaty of Traverse des Sioux, of the 23d of July, 1851, and that after all it is only signed by two of the old and well recognized chiefs of the bands, and by only one who signed the treaty.

This receipt reads as follows:

We, the chiefs of the See-see-toan and Wah-pa-toan bands of Dakota or Sioux Indians, in "open council" assembled, do hereby acknowledge to have received of Alexander Ramsey, superintendent of Indian affairs, the sum of two hundred and fifty thousand dollars, under the first clause of the fourth article of the treaty of Traverse des Sioux of the 23d of July, 1851; two hundred and ten thousand dollars of which we desire him to pay, in full acquittance of our just obligations at the date of said treaty, to our traders, agreeably to the distribution made at the time of the treaty aforesaid, and the balance to our relatives of mixed blood.

NOVEMBER 29, 1852.

E-ta-wah-ke-an, his x mark.

Wah-nok-soon-ta, his x mark.

Yah-zoo-ah-pee, his x mark.

O-kee-tah, his x mark.

Et-chash-kah-sko-mah-nee, his x mark.

Wah-na-ta, his x mark.

No-hope-ton, his x mark.

Wam-du-pi-du-ta, his x mark.

A-ris-sar, his x mark.

In-tue-boo-kar-dan, his x mark.

O-tak-e-ta, his x mark.

Hoo-pah-ina-pek-dou-tah, his x mark.

Witnesses :

THOMAS FOSTER,

JNO. C. KELTON, U. S. A.,

CHARLES D. FILLMORE,

WM. HENRY FORBES.

I certify, on honor, that the above account is correct and just, and that I have actually, this 29th of November, 1852, paid the amount thereof.

ALEXANDER RAMSEY.

This receipt, it will be perceived, has direct reference to the distribution as made by the *schedule* attached to the "Traders' Paper."

The old and well recognized chiefs of the See-see-toan and Wah-pa-toan bands, who signed the treaty of Traverse des Sioux, of July 23, 1851, are: 1. Mah-zah-shah, or Red Iron; 2. E-yang-mo-nee, or Running Walker; 3. Wah-min-da-ne-chah, or the Orphan; 4. E-ta-wah-kee-an, or Limping Devil; 5. Ish-tah-hum-bah, or Sleepy Eyes; and 6. O-pee-en-dah, or Big Curly Head; Wah-nok-soon-ta, or the Little Rapids Chief, is also one of those old chiefs, but his name is not to the treaty.

Theophile Bruguier, says, "that he has been trading, and hunting, and farming among these Indians, on his own account, for the last eighteen years; and that the chiefs whose names are above mentioned are *all* the chiefs of these bands; and that E-ta-wah-ke-an, or Limping Devil, and Wah-nok-soon-ta, or the Little Rapids Chief, are the *only* names of chiefs to that receipt, for the two hundred and fifty thousand dollars. But he does not know No-hope-ton and Wah-na-ta, as chiefs."

Doctor Thomas S. Williamson, a resident missionary among these Indians, says: "I only *find* the names of *three* chiefs of those who signed the treaty in 1851, to Governor Ramsey's receipt for the two hundred and fifty thousand dollars (\$250,000;) that there are *eleven* chiefs in all, now on Major Murphy's list, (the present Indian agent,) at the "Red Wood" agency. That these three are E-ta-wah-ke-an, or Limping Devil; Wah-nok-soon-ta, or the Little Rapids Chief; and Wah-na-ta."

Alexander G. Huggins, says: "That E-ta-wah-ke-an, or Limping Devil, is the *only* chief whose name is to the receipt, who signed the treaty in 1851."

Martin McLeod, says: "That he was present when *four* of the Indians signed this receipt, to wit: Young Sleepy Eyes; Wah-na-ta; O-tak-e-ta, and No-hope-ton; and that he considers all of them as chiefs."

Philander Prescott, an old interpreter and superintendant of farming, &c., among the Sioux Indians, says, "that there are now the names of *eleven* chiefs of the *upper* See-see-toan and Wah-pa-toan bands, upon the 'roll book' of the agent; that he found the names of O-tak-e-ta, No-hope-ton, and O-pee-yah-hen-da-ya, on the 'roll' and named as

chiefs sometime last winter; that Wah-na-ta is half Yankton and half See-see-toan, and is also named as a chief upon the 'roll.' And that of these *eleven* chiefs, he sees the names of six of them on the receipt to Governor Ramsey."

The removal of Red Iron from his chieftainship, and the appointment of these young chiefs since the treaty in 1851, is doubtless what is intended by the charge of oppressive conduct towards the chiefs who were the authorized agents of these bands, and the substitution of others as chiefs, having no authority with the nation. It is due to Governor Ramsey, nevertheless, to say, that it does not appear from the evidence that these young chiefs were appointed by him, or by virtue of his authority.

Another means resorted to, to induce the Indians to sign this receipt, as appears by the testimony, was the withholding the payment of their "annuity money," until they *first* agreed to sign it.

Wm. B. Dodd, says: "That he was present at the payment of the 'annuity money' to the Indians at Traverse des Sioux, in the '*fall*' of 1852; that the Indians in the first instance refused all payment, unless they could receive the *whole* of the money; they wanted the whole and not a part of it; they refused to sign any receipts until they got their money. (Meaning the two hundred and fifty thousand dollars.) That an Indian by the name of O-tak-e-ta, appeared there as a chief of the 'orphans' band—was recognized as a chief, and received 'annuity money' as such; that a portion of his band was paid in the afternoon of the same day; that the next day, the payment commenced generally; that before the payment commenced, Governor Ramsey, Hugh Tyler, and Hercules S. Dousman, were up stairs in the house of Mr. Huggins; that they came down in the front room, when he asked Mr. Tyler when they were going to commence the payments; that he (Tyler) answered, that he did not know; that they were going to try an experiment. And I think he said, '*damn them, I think we will fetch them.*'"

Captain Dodd does not say that Governor Ramsey heard this expression of Mr. Tyler, but only says that they came down together. "That they had concluded to commence the payment (of the 'annuities') and if they could induce two or three to accept the money, that the rest, seeing them buy goods, and have them in possession, would be likely to give in and receive their money also. The payment was commenced with O-tak-e-ta's band. Agent McLean took the money out of the box, and Hugh Tyler paid it out to the Indians. That he saw Hugh Tyler go and bring the money in, and pay it to the Indians."

Nathaniel McLean (the agent) says "that Governor Ramsey brought this 'annuity' money from Washington City, in the '*fall*' of 1852, and delivered it to him at Traverse des Sioux in the month of December, 1852; that he commenced paying it out to the Indians on the next day after he received it; that he frequently asked Governor Ramsey when he intended to commence paying the money, to which he replied that the money would be ready by the time the 'rolls' were made out. There appeared to be some delay in handing over the money and getting the receipts. Upon being asked the question, 'which receipts do you mean?' he answered 'I do not know what his (Governor Ramsey's)

business specially was. I was not in the council about that matter.' He further remarked, in reply to another question, 'We were very little detained after the 'rolls' were ready.' "

There appeared, very manifestly, to be a reluctance, on the part of Governor Ramsey, to deliver over this "annuity" money to Agent McLean—whose duty it was to disburse it to the Indians—and some unnecessary delay, although for a short time only. And, whatever may have been his motives in withholding this money, from the time he returned from Washington up to the very day of payment, it is equally evident that it was not delivered to Agent McLean, for distribution among the Indians, until he had *first* procured his receipt for the two hundred and fifty thousand dollars.

If this "annuity money" was thus withheld from the Indians, after the cold weather had set in, in December, as a means of coercing them to sign this receipt,—and the evidence warrants the inference—is not this also to be regarded as an unwarrantable act of oppression?

Governor Ramsey justifies the payment of this two hundred and fifty thousand dollars to the "traders" and "half-breeds," in the "first" place, upon the authority of the "Traders' Paper," dated at Traverse des Sioux, the 23d of July, 1851, which has already been commented upon; and *secondly*, in virtue of the power of attorney executed to him by the Indians, at St. Paul, on the 8th of September, 1852.

This power of attorney has already been copied into the statement to this report. That part of it upon which the governor relies for his authority is *italicised* by him in the printed copy to be found in Senate Executive Document, No. 29, *part 2*, 2d Session of the 32d Congress, pages 25, 26, and 27, and reads as follows:

"And we also authorize, empower, and request him to do, or cause to be done, all the acts contemplated by the said fourth article (of the treaty of July 23, 1851) for and by us to be done; to appropriate the said money in accordance with and for the purpose of carrying out the equitable and true intent thereof; all such acts, when done, to be final and binding upon us, and to have the same force and effect as if done by us."

This portion of the power of attorney, when isolated from the rest of it and left without explanation, would seem to confer upon Governor Ramsey the discretion to appropriate this money when received by him, according to his own judgment of the proper construction to be given to the *fourth* article of the treaty referred to. But was this the intention of the Indians? Such a disposition of the money had already been made by the "Traders' Paper," and if no change was contemplated, why execute this new power of attorney?

The testimony clearly shows that the Indians had become very much dissatisfied with the disposition to be made of this money, as indicated by the *schedule* to the "Traders' Paper," and desired it to be paid into their own hands, in the first instance; and to effect that purpose, they declare, at the close of this "power" to Governor Ramsey: "*And we do hereby revoke and annul all former and other powers of attorney executed or given by us with reference to the receipt or collection of the said sum of money or any part thereof.*"

The evidence will show what powers of attorney were intended to

be revoked and annulled, and what disposition was to be made of the money as explained to and understood by the Indians.

Mr. McLean (the agent) says, in reference to this power of attorney, that "the Indians had been in council at Henry M. Rice's house or store, (at St. Paul,) with Mr. Rice and others, in getting them to sign the amendments to the treaty. The power of attorney to Governor Ramsey was there explained by Mr. Prescott, the interpreter, in the language of the paper as it reads. I then made a speech to the Indians, and told them *that it revoked all other powers before given by them*. Mr. Rice then explained it to them, saying that it *broke* all former 'papers' made by them.

"The Indians seemed anxious to get clear of any and all former 'papers' which they had signed. They spoke of a number of papers which they had signed, and Mr. Sweetzer's paper among the rest, and wanted all of them swept off.

"After the Indians had concluded to sign the amendments to the treaty, and the power of attorney to Governor Ramsey, we then went to Governor Ramsey's office. The papers were taken there, and the Indians made speeches to Governor Ramsey. They said that they had come to sign the papers; that one of the papers (meaning the power of attorney) was to break all former papers made by them, and that *they wanted him to bring the money to them*; and the power of attorney having been before fully explained to them, both the papers were signed by the Indians."

When the question was propounded to the interpreter, Philander Prescott, "What did the Indians understand were the contents of that power of attorney to Governor Ramsey?" he answered: "The Indians were told what the contents were before he went to Governor Ramsey's office, by Major McLean and Henry M. Rice. They were told that it destroyed all former powers of attorney and gave Governor Ramsey power *to bring the money here to them*. The two former powers of attorney, which the Indians understood it to destroy, was one to Mr. Henry H. Sibley, and the other to Mr. Sweetser; and that he acted as interpreter when this explanation was made to the Indians."

Does not this evidence show that the Indians understood by this "power" that the money was to be brought by Governor Ramsey, and paid into their own hands? And that if any different construction was intended the Indians were deceived by false explanations, or, at least, by a misapprehension of its contents? And although it does not appear that Governor Ramsey made them such a promise at this conference, and it is now insisted by him that the power of attorney had been interpreted and explained to the Indians before they came to his office with the papers on that occasion, as mentioned by the witnesses, still it is evident, from what did take place, that the impression was left on their minds that the money was to be brought and paid into their own hands.

Governor Ramsey also insists that a discretion was allowed him, in regard to these payments, by the terms of the letter of instruction of the Commissioner of Indian Affairs (Luke Lea) of October 4th, 1852, in which he makes reference to the provisions of these treaties in the following language, to wit: "*Familiar as you are with the provisions of*

these treaties, it is unnecessary to give you detailed instructions in regard to the funds now placed in your hands," &c. This clause, it is contended, had reference, among other things, to the payment of this money to the traders, agreeably to the understanding between them and the commissioners at the time the treaty was made.

The Hon. Luke Lea says, in his testimony in regard to this matter, that "about the time the Sioux money was placed in Governor Ramsey's hands, to wit, in October, 1852, a conversation took place between him and myself, the full particulars of which I do not distinctly remember; but I recollect that allusion was made to the arrangements entered into between the Indians and their traders at Traverse des Sioux; that Governor Ramsey expressed himself as apprehensive that the Indians, in consequence of being tampered with, would be disposed to repudiate their just engagements, and have the money squandered or misapplied in such a way as to defraud their honest creditors, and debauch themselves; that my reply was, in substance, they ought not to be permitted to do so; and that if necessary to prevent such injustice and mischief, they should be required to abide by the agreement between them and their traders, provided it was fairly and understandingly made.

"These remarks apply more particularly to the payment of the See-toan and Wah-pa-toan fund; although all the funds provided for under the *fourth* articles of both treaties were alike embraced in the instructions."

But cruel treatment is also charged in the case of the Med-a-wah-kan-toan bands, as well as towards the See-toan and Wah-pa-toan bands of *upper* Sioux Indians. The Med-a-wah-kan-toan bands were entitled to one hundred and ten thousand dollars under the *fourth* article of the treaty of the 5th of August, 1851. Of this sum twenty thousand dollars had been set apart by Governor Ramsey for their removal and subsistence, and it became an object with him to procure their receipt for the residue, or ninety thousand dollars. Here, again, he had to encounter difficulty as with the *upper* bands, as these Indians also, in the first instance, refused to sign the receipt, and insisted on the payment of the money into their own hands. And here again it is said, that their "annuities" were withheld from them, as one of the means of "*starving*" them into the signing of this receipt.

Wah-coo-ta, the most aged chief among them all, says, in his evidence, "We were forced to sign, for fear of starvation. We were threatened, and we signed a paper at Mr. Steele's house. Wa-ba-shaw gave in first. I staid there until late—near midnight—and then I signed it."

Tah-o-ah-ta-doo-tah, or Little Crow, says: "We would not sign the receipt at first. Wa-ba-shaw and Wah-coo-ta signed it *at night*, and I then signed it the next day. We signed the receipt for the ninety thousand dollars *before* our 'annuities' were paid. We were then waiting a good many days and nights—a month, perhaps, or more."

Mah-zah-ho-tah, or Grey Iron, says: "Wa-ba-shaw and Wah-coo-ta signed it at night; Little Crow, and others, at Mr. Sibley's, the next morning; and I then signed it at Fort Snelling."

Skak-o-pee, or Little Six, says: "We waited for our money at the

“agency” (at Fort Snelling) near two months. They made us suffer a good deal.” Upon being asked the question, “Did you get a plenty to eat, while you were at the ‘agency’ waiting for your money?” he answered: “We did not get anything from either of them. We suffered a good deal, and our children were like to die. I went there in the month the Indians gather ‘wild rice,’ and staid until ‘the bucks cast their horns.’ I do not know of any provisions being issued to the seven Med-a-wah-kan-toan bands, while we were there, for near two months.”

We-chonk-pee, or ‘The Star,’ says: “We remained at the ‘agency,’ waiting for our money, and suffered for two months, until the snow fell. There were no provisions issued to the Indians during these two months. There were no provisions issued to us at all. They wanted us to die of hunger.” Upon being asked the question, “Were you prevented from going on your ‘fall hunts’ by this delay?” he answered: “There were a great many industrious men among us, who hunt furs for the traders, who were prevented from going out upon their ‘hunts’ for the want of the money and goods, which Governor Ramsey held in his arms.”

Mock-pee-we-chas-tah, or the Cloud Man, says: “We waited near two months at the ‘agency’ for our money, until our children were near starving; we staid until the snow fell. I do not know of any provisions being issued to the Indians.”

This is the testimony of six of the Med-a-wah-kan-toan chiefs. It is Indian testimony, but is it not true?

Nathaniel McLean (the agent) is of opinion that the Indians did not wait at the “agency” for more than two or three weeks, before they were paid their “annuities,” but admits that he did not recollect as to dates. Upon being asked the direct question, “Were any provisions issued to the Indians while they were at the ‘agency’ waiting for their annuities?” he answered: “I think not much. *I do not recollect that I issued any.*”

No provisions issued during that cold, inclement season of the year! and yet this large sum of money belonging to them, and other funds available for that purpose, in the hands of agents, to whose guardianship and kind offices they had been committed by the government!! How is such a dereliction of duty and want of humanity to be accounted for? No wonder the Indians exclaimed: “*They made us suffer a good deal, and our children were like to die.*”

Agent McLean further says, in reply to the question “Did Governor Ramsey say to you *not* to pay the ‘annuity money’ until he got ready?” “I do not think that he did, *in that way*. The Indians became impatient, and asked me to request the governor to let them have their *old* ‘annuity’ money, and to let their *new* ‘annuities’ pass over, as they wanted to go off upon their ‘hunts.’ That they would take their goods and provisions under the *old* treaty of 1837; and as there was trouble about the *new* treaty money, they would let the *new* pass. I then came, or started, to St. Paul, and was informed that they had agreed upon matters, and that they would all be ready in a short time.” Mr. McLean says that Governor Ramsey did not request him *not* to pay the “annuity” money until he got ready, “*in that way*.” Then the reasonable inference is that he did request him in some other way; and that

the matters referred to, as having been agreed upon, when he went down from the 'agency,' at Fort Snelling, to St. Paul, (*a distance of five miles only*,) was the consent of the Indians to the signing of the receipt for the ninety thousand dollars. He further said that Governor Ramsey told the Indians "that he was not bound to pay them until they removed to their new homes; but that he would perhaps do so, if they were honest men, or words to that effect. *That he could pay them, or not pay them, at his discretion*—and referred them to the treaty."

It appears also from the testimony, that there were *five* young Sioux warriors of the Med-a-wah-kan-toan bands in confinement about this time at Fort Snelling, for killing some of the Chippewa Indians; that they were subject to the orders of Governor Ramsey, and that their release from imprisonment or not was made to depend upon the compliance or non-compliance of the chiefs, in the signing of the receipt for the ninety thousand dollars.

Tah-o-ah-ta-doo-tah, or Little Crow, says, upon his examination, "that there were five of their young men confined at Fort Snelling as prisoners, at that time, for killing Chippewa Indians; that one of them was his cousin; one the son of We-chonk-pec, or the Star; and one the son of 'Bad Hail,' who is a first soldier. That Governor Ramsey said that their 'great father' at Washington told him to retain them in the 'guard house' until they (the chiefs) signed the 'paper;' and to retain their money, and not to pay it to them until they signed it. That if it had not been for these things, they would not have signed the 'paper' all the winter." He was then asked, "when you signed the paper, did Governor Ramsey release the prisoners?" to which he replied, "Yes; after we signed the 'paper' we went over for them, and they were let out."

Mah-zah-ho-tah, or Gray Iron, says, "that Governor Ramsey told him when they (the Indians) had paid their debts and signed a 'paper,' he would turn the young men out of prison. That the paper he wished us to sign was the receipt for seventy thousand dollars. That Governor Ramsey also told him, if he would sign the receipt that he would let the prisoners out, and pay the chiefs the money they were to get. That they did sign the receipt, and then the prisoners were turned out."

Shak-o-pec, or Little Six, says, "that he had a conversation with Governor Ramsey concerning the prisoners. That Governor Ramsey said, 'if you will sign a "paper," I will release them.' He also said, 'that he would pay us the money and goods for our lands;' and that was his song for two months."

We-chonk-pec, or the Star, when asked upon his examination if any thing was said about the release of the prisoners, replied, "that Governor Ramsey said, 'if we would sign the "paper," he would release the young men who were in confinement, belonging to *four* of the bands.' He had a paper which he wanted us to sign, but we did not want to sign it. Wa-ba-shaw said, 'when you give us our money and blankets, then we will sign it.'"

Mock-pee-we-chas-tah, or the "Cloud Man," when asked a similar question, answered; "Governor Ramsey said what the other Indians have told you. He said, 'if we would sign the paper that we would then get our "annuities," and the prisoners would be released.'"

Alexis Bailey testified in regard to the release of these prisoners as follows:

Question. "Do you know how Governor Ramsey came to liberate the Indian prisoners who were confined for murder at Fort Snelling?"

Answer. "The chiefs in 'open council' asked Governor Ramsey to liberate them; to which Governor Ramsey replied that he would, provided they acted properly in carrying out the treaty."

Question. "Were these prisoners related to the chiefs of these *lower bands*?"

Answer. "They were related to Little Crows' and the Lake Calhoun bands. They were released by Governor Ramsey, as I understand, about the time of the payment—a little before, or a little after it."

He says, further, "that the Indians were very anxious to have them released."

This releasing of the prisoners seems unquestionably to have had something to do with the signing of the receipt. But as the charge is sustained mainly by Indian testimony, we think that the evidence, in this instance, should be taken with many grains of allowance; although we feel confident that the Indians were impressed with the belief, from some quarter or other, that the release of these prisoners, among other things, was to be the consequence of their signing the receipt.

Governor Ramsey is next charged with having paid over the greater part of the money, appropriated under the fourth articles of the treaties of July 23 and August 5, 1851, to one Hugh Tyler, for payment or distribution to the "traders" and "half-breeds," contrary to the wishes and remonstrances of the Indians; in violation of law and the stipulations contained in said treaties; and also in violation of his own solemn pledges, previously made to them, in regard to said payments.

Of the two hundred and seventy-five thousand dollars (\$275,000) stipulated to be paid under the *first* clause of the *fourth* article of the treaty of "Traverse des Sioux," of July 23, 1851, the sum of two hundred and fifty thousand dollars (\$250,000) was delivered over to Hugh Tyler by Governor Ramsey, for distribution among the "traders" and "half-breeds," according to the arrangement made by the *schedule* to the "*Traders' Paper*." This payment or delivery of the money to the said Tyler was made on two powers of attorney, executed to him by the "traders" and "half-breeds,"—the *first* at Traverse des Sioux, on December 1, 1852, and the second at Mendota, on December 11, 1852—both of which were predicated upon the authority of the "*Traders' Paper*," dated at Traverse des Sioux, July 23, 1851.

For this large sum of money, Hugh Tyler executed two receipts to Governor Ramsey, as the attorney for the "traders" and "half-breeds;" the one for two hundred and ten thousand dollars (\$210,000) on account of the "traders," and the other for forty thousand dollars (\$40,000) on account of the "half-breeds;" the *first* dated at St. Paul, December 8, 1852, and the *second* at Mendota, December 11, 1852.

And of the sum of one hundred and ten thousand dollars, (\$110,000,) stipulated to be paid to the Med-a-wah-kan-toan bands, under the *fourth* article of the "treaty" of August 5, 1851, the sum of seventy thousand dollars (\$70,000) was in like manner paid over to the said Tyler, on a

power of attorney executed to him by the traders and claimants under the said latter treaty, on December 11, 1852. The receipt of the said Tyler to Governor Ramsey for this money, (\$70,000,) is dated at St. Paul, December 13, 1852.

Making together the sum of three hundred and twenty thousand dollars, (\$320,000.) This has been shown to have been contrary to the wishes and remonstrances of a large majority of the Indians, in the first instance, many of whom still continue dissatisfied with the arrangements as they were made.

It is also believed to be in violation of the treaty stipulations, as well as of the law making the appropriations under them.

The treaty stipulations required the money to be paid for the several purposes specified: "*to the chiefs in such manner as they hereafter, in 'open council,' shall request; and as soon after the removal of said Indians to the homes set apart for them, as the necessary appropriation therefor shall be made by Congress.*"

The two clauses referred to are similar in this respect, and both alike contemplate the holding of these "councils" after the treaties should be ratified. They also imply the right of the Indians "to settle their affairs, and to comply with their present just engagements" in their own way as they might request; and, also, to exercise some control over the amounts to be set apart for their *removal and subsistence*.

But in these matters it seems that they have not been consulted at all in "open council" after the ratification of the treaties as was intended; but, on the contrary, arbitrary divisions and distributions have been made of the entire funds, and their right denied to direct the manner in which they should be appropriated.

The appropriations for the fulfillment of these treaty stipulations will be found in the act of Congress of August 30, 1852.

The *third* section of that act provides that the appropriations herein made "shall in every case be paid directly to the Indians themselves to whom it shall be due, or to the tribe, or part of the tribe, *per capita*, unless the imperious interest of the Indians, or some treaty stipulation, shall require the payment to be made otherwise under the direction of the President."

This act directs the money to be paid directly to the Indians, unless there be some treaty stipulation, &c. But here, it is said, there are treaty stipulations. Then the direction of the President should have been first sought and obtained, according to the provisions of the act, before any disposition could have been legally made of the money by any payment to the traders.

We do not suppose that it would have been just towards the traders to have paid this money *per capita* to the Indians, or that such a disposition of it was intended by the act in cases like the present; and hence the exception in favor of treaty stipulations. But we do insist that the special action of the President was necessary to give effect to the treaty stipulations in such cases, and that the money could not be legally diverted from the Indians otherwise than by his special directions.

But it is also said by his accusers that he paid this money to the traders in violation of his own solemn pledges, previously made to the Indians, in regard to said payments.

Nathaniel McLean, at that time the agent for the Sioux Indians, says ~~in~~ his report of December 13, 1851, to the Hon. Luke Lea, Commissioner of Indian Affairs, which is affirmed by his evidence in relation to this matter; that a large deputation from the See-see-toan and Wah-pa-toan bands, who were parties to the treaty at Traverse des Sioux of July 23, 1851, numbering twenty-one names, had come down to see him for the purpose of expressing their dissatisfaction in relation to the paper which had been signed at the time of making the treaty (the "Traders' Paper") for the payment of their money to the traders; that they expressed a desire to see the superintendent, (Governor Ramsey,) and to talk with him upon the subject, and particularly as he was one of the commissioners who had signed the treaty in behalf of the United States; that some of these Indians had travelled from "Lake Traverse," a distance of two hundred and fifty miles, others from "Lac qui Parle," a distance of two hundred miles, and appeared to be very determined in their opposition to the "paper" they were induced to sign, transferring their money to the traders; that upon being questioned by him again and again, they collectively and individually affirmed that it was not explained to them at the time their signatures were obtained, nor at any other time; and said that they were instructed to make this declaration in behalf of their people at home as well as for themselves; that all the See-see-toan and Wah-pa-toan bands, who were alone interested in the treaty of "Traverse des Sioux," wished the two hundred and seventy-five thousand dollars, (\$275,000,) mentioned in the treaty stipulation, to be paid directly to themselves, to be disbursed by them, after the money should be received, in such manner as they might think just and proper; that on the 8th of December, 1851, a "council" was held with them in the governor's room at St. Paul, when the Indians, in "open council," stated to his excellency, in his presence, (agent McLean's,) the substance of what he has related in respect to the treaty, and the "paper," said to be an agreement with their traders to pay their debts; that they had been deceived in signing that "paper," as it had not been explained to them, protested against its being carried out, and wished us to send their requests to their "great father" at Washington, that their father would send them the money, according to the stipulations of the treaty, in order that they might settle their accounts according to justice, and provide for their removal and subsistence.

The governor then read and explained to them the articles of the treaty—that part particularly which related to the payment of the two hundred and seventy-five thousand dollars, (\$275,000,) to enable them to settle their accounts, the expenses of transportation to their new homes, and subsistence for the first year after their removal.

He said to them that the language was specific; that the money was to paid to the chiefs and braves of the tribe in such manner as they in "open council" should determine, in order to enable them to settle up their business, subsist themselves for one year, and their expenses for removal; that the government would thus carry out the stipulations of the treaty, without reference to any agreement or contract with traders or others which they have made, or may make; that the money would be paid to the *chiefs and braves*, and that it was for them to dispose of

it afterwards as they might think proper; that the "paper" to which they alluded, (the "Traders' Paper,") was no part of the treaty; that the commissioners (Luke Lea and Alexander Ramsey) had no power, and assumed none, in relation to the payment of the debts to their traders; that that was a matter entirely between themselves, over which the commissioners would exercise no control; that their agent would make known their wishes to their "great father" at Washington, (the President,) through the regular officers, whom the government have appointed to attend to their business; that the "council" then terminated, and the Indians dispersed apparently satisfied; that the explanations and advice, as given to them by the superintendent, (Governor Ramsey,) was satisfactory to the Indians, and in accordance with his own views as also expressed to them.

Such is the evidence of Nathaniel McLean, and such were the explanations and promises made by Governor Ramsey to these Indians, solemnly and in "open council." Some of them, Agent McLean says in his report, had come 250 miles, and others 200 miles to this council and returned to their far-distant homes in the wilderness satisfied with the assurances of their superintendent (Governor Ramsey) and their agent, (Nathaniel McLean,) that their wishes would be properly represented to their "great father" at Washington, and the money would be paid to their chiefs and braves in the first instance, and not to the traders.

This report of Agent McLean was *officially* communicated to the Indian Department at Washington, by Governor Ramsey himself, in a letter dated at St. Paul, January 21, 1852, and is now on the files of that department.

These views, as expressed by Governor Ramsey and Agent McLean of the proper construction to be given to these treaty stipulations, are in accordance with the views entertained by us, and upon which we have predicated this report in that respect.

And yet this large sum of money (\$250,000) was paid over to Hugh Tyler, on a power of attorney depending *alone* for its authority upon this "Traders' Paper," notwithstanding these explanations and promises.

Is it matter of wonder then, that after this deputation of Indians had returned to their homes, and repeated the promises of their superintendent and agent to their nation in the "*fall*" of 1851, and finding one year afterwards (in the fall of 1852) that the money after all was about to be distributed among the traders, as provided for by the *schedule* to the "Traders' Paper," regardless of their wishes, that Red Iron and his warriors, indignant and disappointed, should have established the "soldier's lodge?"

We are clearly of opinion, under all the circumstances presented by the evidence, that it was the duty of Governor Ramsey, after he had received this money under the appropriation made by Congress, to have summoned the chiefs of the bands together, at some convenient place, to have ascertained from them, in "open council," their wishes in regard to its disposition, and then to have paid it in such manner as they may have requested him, independent of their engagements, at the time of the making of the treaty, outside of its written stipulations.

The President in the meantime might have been consulted, and his special direction invoked under the provisions of the law making the appropriation, and the whole matter carried according to the treaty stipulations, which provide that this money "*shall be paid to the chiefs in such manner as they hereafter in 'open council' shall request.*"

5. He is next charged with having directed or permitted the greater part of this money to be paid *directly* to the traders and employees who were, or had been, connected with the "American Fur Company," and the fur company of Pierre Choteau, jr., and Company, by the said Hugh Tyler, who had been employed by them for that purpose, contrary to the repeated remonstrances of the Indians by their chiefs, in violation of law and the said treaty stipulations; and that the said Tyler was allowed to deduct from the said payments (both from the "traders" and "half-breeds") a very large per centage on the amounts paid to them, to the prejudice of the just rights of the Indians, and to the manifest injustice of such of the "traders" and "half-breeds" as had not consented or agreed to that arrangement.

It is true that the greater part of this money was paid *directly* to the traders and employees who were connected with the fur company of Pierre Choteau and Company, or had formerly belonged to the "American Fur Company," by Hugh Tyler, and with his (Governor Ramsey's) agent; and that the large amount paid to Henry H. Sibley in the first instance, and afterwards received by him from other claimants, and from the half-breeds, was paid to and received by him, for the most part, as the agent of these two companies. As these amounts, when aggregated, amount to a large sum of money, it is but just to Mr. Sibley to state that the very large amount of capital formerly invested in this trade by the "American Fur Company," and subsequently by their successors, Pierre Choteau and Company, was in a corresponding ratio to these amounts.

The evidence of Joseph A. Sirc, of St. Louis, Missouri, as taken by by the Senate's committee, shows that he has been connected with Mr. Sibley in the business of trading since the year 1839. He states "that the house of Pierre Choteau and Company, of which he is a partner, has been supplying Mr. Sibley with goods since that time; that the goods supplied for the trade have always been of the best kind of English goods—such as blankets, cloths, &c., and, also, a large quantity of provisions suitable for the Indians; that since the year 1842 the accounts of the business, as rendered to the company by Mr. Sibley, have showed a loss of about ten thousand dollars per year, and in some instances as much as thirty thousand dollars; that notwithstanding these deficiencies on the immense quantity of goods sold to the Indians on *credit*, who were unable to pay for them, and who could not have subsisted without them, the house of Pierre Choteau and Company, under the advice and influence of Mr. Sibley, still continue to furnish supplies to these Indians on credit, not only because they expected to be paid when a treaty should be made, but also through a sense of humanity; that although Mr. Sibley seems to have received a large sum of money, that he knows, and can prove at any time, that his business with the Sioux Indians still shows a large deficiency.

We have said before in this report, that the payments, *as made*, were not, in our judgment, in accordance either with the law or the treaty stipulations. It appears, nevertheless, that the "traders" had an understanding with the commissioners, (Luke Lea and Governor Ramsey,) at the time of making the treaty, that they were to have this money as it was subsequently paid to them.

The amount paid out by Hugh Tyler was three hundred and twenty thousand dollars, (\$320,000,) embracing the See-see-toan and Wah-pa-toan fund of two hundred and fifty thousand dollars, (\$250,000,) upon which he charged and received a discount or deduction of *fifteen* per cent.; and the Med-a-wah-kan-toan fund of seventy thousand dollars, (70,000,) upon which he charged and received a discount or deduction of *twelve and a half* per cent.

The Wah-pa-koo-ta fund of ninety thousand dollars (\$90,000) was paid out by Mr. Sibley, and *ten* per cent. deducted, which was afterwards also paid over to Mr. Tyler.

The amount of per centage received by Hugh Tyler may therefore be stated as follows:

Discount on the amount paid to the " <i>traders</i> " of the See-see-toan and Wah-pa-toan fund, \$210,000, at 15 per cent.....	\$31,500
Discount on the amount paid to the " <i>half-breeds</i> " of the See-see-toan and Wah-pa-toan fund, \$40,000, at 15 per cent.	6,000
Discount on the amount paid to the " <i>traders</i> " and " <i>half-breeds</i> " of the Med-a-wah-kan-toan fund, \$70,000, at 12½ per cent.....	8,750
Amount of per centage received from Henry H. Sibley, on account of deduction of 10 per cent. on the disbursement of the Wa-pa-koo-ta fund of \$90,000.....	9,000
Making the aggregate amount of.....	<u>\$55,250</u>

Many of the traders and claimants, it seems, assented to this arrangement, while others complained of it as an unauthorized and unjust exaction; but all, it appears, were compelled to submit to it in the end.

Alexis Bailey, when asked the question, "Did you ever know of any person out of all upon the traders' list, or schedule, who received their money unless they submitted to this *fifteen* per cent. discount by Hugh Tyler?" answered, "I do not know of any;" and to the question, "Were not the claimants told or given to understand that unless they submitted to the discount of *fifteen* per cent., that the money would be paid directly to the Indians?" he replied, "I did not hear Governor Ramsey or Hugh Tyler say so; but it was said in the presence of Hugh Tyler." He also remarked that he had not made any agreement with Hugh Tyler, to pay him this *fifteen* per cent. before he demanded his money, and that he considered it an *abominable charge*. He said that the power of attorney to Hugh Tyler was generally signed at Mr. Sibley's office, in Mendota, about the latter part of November, or fore part of December, 1852, after the Indians had been assembled at Traverse des Sioux and paid their "annuities" in part. That he did not see all sign it, but that it is his impression that they generally signed

it at Mr. Sibley's office in Mendota. That at this time Governor Ramsey had returned from Washington with the Sioux money.

Upon being asked in relation to the per centage on the Wah-pa-koo-ta fund of *ten* per cent., which had been deducted by Mr. Sibley and paid to Mr. Tyler, Mr. Bailey replied: "I cannot tell why it was necessary for the traders to pay *ten* per cent. to Hugh Tyler to get their money from these Indians. I know I had to pay *nine hundred dollars* to get *nine thousand* that was due to me. No part of this money was used, or necessary to be used, to induce or influence the Wah-pa-koo-ta chiefs to do anything. They were always willing to pay, and never gave trouble to anybody."

Mr. Sibley explains that this Wah-pa-koo-ta payment was taken into the general arrangement with Hugh Tyler; that the agreement extended to all the funds spoken of under both the treaties; although a larger per centage was to be paid upon some of the funds than upon others. As to what became of this per centage of \$55,250, after it went into the hands of Hugh Tyler, we could not ascertain from the witnesses. Some expressed their ignorance; while others refused to answer; and one gentleman declined to answer, as he said, *under the advice of counsel*. Whether the services performed were commensurate with the per centage charged, we are unable to say, as the nature of these services was not explained by the witnesses. But whether too much or too little, or whatever disposition may have been made of it by Mr. Tyler, it is due to Governor Ramsey to say, that the evidence does not show that he received any part of it, and Hugh Tyler says, in his evidence before the Senate's committee, that he did not receive any part of it.

6. It is also charged that he failed to reserve a sufficiency of the money for the removal and subsistence of the See-see-toan and Wah-pa-toan bands of Sioux Indians for the first year after their removal, according to the provisions of the treaty of Traverse des Sioux, of July 23, 1851.

The amount reserved for these purposes, from the fund of two hundred and seventy-five thousand dollars, (\$275,000,) was twenty-five thousand dollars; of this sum, eighteen thousand nine hundred and thirty-one dollars had already been expended by Governor Ramsey when succeeded in office by Governor Gorman, leaving only six thousand and sixty-eight dollars for their subsistence in the future, on the 6th of May, 1853. Whether all the bands intended to be provided for shared in this expenditure and distribution as made, or what portion of them, and to what extent, is not shown by the testimony. It is known, however, that these bands are very much scattered, and that some of them resided at "*Lac qui Parle*" and "*Lake Traverse*," distant from St. Paul more than two hundred miles. There are said to be *eleven* chiefs now upon the "roll" at the "Redwood" agency, on the Minnesota river, and the presumption is that each chief has a band, making *eleven* bands of the See-see-toan and Wah-pa-toans interested in this reserved fund of twenty-five thousand dollars. It is difficult to say what precise sum should have been retained for these purposes, with so little data upon which to make an estimate. But it would appear, from the manner in which this twenty-five thousand dollars was reduced to so small a sum in so short a time, with so little apparent benefit to

all the bands concerned, that it was very far short of what would have been required for any practical and beneficial use in the way of removal and subsistence, if indeed any practical aid was intended by the treaty.

By removal is intended the necessary means of comfortable conveyance for the journey to be travelled, as for instance: wagons, and horses or oxen, and tents or coverings for their lodges by land, or canoes and the proper outfits, if by water, with the provisions necessary for such journeys or voyages, in either case, provided at convenient depots along the routes leading to the different places of destination. *Subsistence for a year* also means something more than a little provision issued, or sent to them now and then, at long intervals of time, without knowing whether it is received or not, and whether the distribution among the different bands is fair and equal, according to their relative numbers, wants, and condition.

It implies regular supplies of provisions to all the bands during the year of subsistence, suitable coverings for their "tee-pees" or lodges, buffalo robes and blankets, and proper materials for clothing; and that all these things should be supplied at the proper times and at the proper places where they are wanting, and honest, industrious men employed for the purpose; and money enough to have paid for these supplies and the expenses of transportation and delivery, should have been reserved from this large fund of two hundred and seventy-five thousand dollars, without stint and without grudging, towards these Indians.

They live in a country and climate cold and desolate in the winter: far removed, in some instances, from the white settlements; and, if overtaken by the snows, without the necessary supplies at that inclement season of the year, no one unacquainted with their condition can tell the extent of their sufferings and distress.

Whether these things were done or not, to any beneficial extent, with the sum reserved, the evidence does not show.

7. Governor Ramsey is charged, in the last place, with having procured "*receipts*" from the Indians for the money paid to the "traders" and "half breeds," to be used as vouchers in the settlements of his accounts at the Treasury Department, by the removal of some of the recognized chiefs, and the appointment and substitution of others not recognized by the Indians; and by procuring the signatures of unauthorized persons, who were not chiefs, in some instances, and of the recognized chiefs, by fraudulent and improper means, in others.

The receipts here alluded to are, the one from the See-see-toans and Wab-pa-toans, for two hundred and fifty thousand dollars, (\$250,000,) dated the 29th November, 1852; and the other from the Med-a-wab-kan-toan chiefs, dated at Mendota, the 9th of November, 1852, for ninety thousand dollars, (\$90,000.)

These receipts, to be valid against the Indians, should have been the result of agreements with the recognized chiefs of the appropriate bands, or, at least, of a majority of them, in "open council," according to the terms of the treaties, and in conformity with their own requests in regard to the disposition of this money.

This question of "chieftainship," we find, is one of no little perplexity, and concerning which a great contrariety of opinion will be

found in the testimony of the witnesses. It is for the Indians themselves, we suppose, to determine who shall and who shall not be their chiefs. Although instances are to be met with, where they are indebted for their appointments to the "agents" of the government.

We also find, that those who have resided long among the Indians, and who ought, from their opportunities, to be well acquainted with their character and customs, differ in opinion in this matter as much as others.

The first receipt has to it the names of *two* out of *seven* of the old chiefs only, to wit: E-tah-wah-ke-an, or the "Limping Devil," and Wah-nok-soon-ta, or the "Little Rapids Chief." The names of the young chiefs who have signed it, are Wah-na-ta, No-hope-ton, O-tah-e-ton, and Young Sleepy Eyes,—making six in all. These young chiefs, it appears, have been appointed in some way very recently, as they were not recognised as such at the treaty of 1851. But they are now on the agents' "roll" of chiefs, at the "Red Wood" agency, and recognised as such in the payments of "annuities."

We have already stated the manner in which this receipt was obtained from the Indians, and will now only refer to the evidence on that subject, (which is too voluminous to be embodied in this report,) for a more satisfactory explanation of the matter; if a further examination should be considered necessary in regard to it.

The other receipt has to it the names of the *seven* Med-a-wah-kan-ton chiefs, and is not, like the other, deficient in the signatures of the old well-recognised chiefs of the bands. It is also proper in form, and fair enough upon its face in all respects. In addition to some of the means which, it is alleged, were resorted to for the purpose of inducing the Indians to sign this receipt, it is also said that twenty thousand dollars, of the ninety thousand mentioned in the receipt, were given to the chiefs to sign it.

There were *seven* bags of gold, each containing two thousand eight hundred and fifty-seven dollars, and fourteen and two-sevenths cents, (\$2,857 $14\frac{2}{7}$), and a bag given by Governor Ramsey to each one of the *seven* Med-a-wah-kan-toan chiefs. The chiefs who received this money were—1, Wa-ba-shaw; 2, Wah-coo-ta; 3, Shak-o-pee, or Little Six; 4, Tah-chan-koo-wash-ta, or Good Road; 5, Mah-zah-ho-tah, or Grey Iron; 6, Tah-o-ah-ta-doo-ta, or Little Crow; and 7, Mock-pee-we-chas-tah, or the Cloud Man.

A joint receipt was signed by these chiefs for these *seven* bags of money, amounting together to twenty thousand dollars, dated St. Peter's agency, November 11, 1852. This sum is also included in the receipt for the ninety thousand dollars, which was dated at Mendota, November 9, 1852.

Alexis Bailey testifies, in relation to the object of giving this twenty thousand dollars to the chiefs, as follows:

Question. How much did the Med-a-wah-kan-toan bands receive of the one hundred and ten thousand dollars (110,000) due to them under the *fourth* article of the treaty of August 5, 1851?

Answer. Twenty thousand dollars was set apart for their removal, and subsistence the first year; twenty thousand dollars, at the instigation of some influential men, was set apart to be given to the chiefs, to

be distributed by *them* to their "half-breeds," as they might think proper; and seventy thousand dollars was left, to be paid to the traders.

Question. What was that twenty thousand dollars given to the chiefs for? If you know what motive was in it, we want to know it.

Answer. It was for the purpose of inducing them to sign the receipt to Governor Ramsey, for the ninety thousand dollars. Governor Ramsey got the receipt.

In regard to the payment of this twenty thousand dollars to the *seven* Med-a-wah-kan-toan chiefs, it is due to justice that some notice should be taken of the payments to two of them—Wa-ba-shaw and Wah-coo-ta.

Wa-ba-shaw is an Indian of decided character; is generally recognised as the "head chief" of the *seven* Med-a-wah-kan-toan bands; and, on great occasions in "council," is the chief speaker for his nation. Wah-coo-ta is the oldest chief among them; is of sedate countenance, now in feeble health, and well respected by his people. They were at the house of Mrs. Finley, (a half-breed,) near to Fort Snelling, and some distance from their homes. They had come there with their bands for the purpose of attending the "payments," and it was in the month of November, 1852. They were sitting near a table, when Governor Ramsey came in with the two bags of money in his hands, and put them down upon the table in front of them, and said: "Here is your money." Mr. Franklin Steele, who resides as a trader at Fort Snelling, and Jack Frazer, a Sioux half-breed, and nephew to Wah-coo-ta, are represented as having been on opposite sides of the table. After the money was placed upon the table by Governor Ramsey, Jack Frazer took possession of it, and delivered it to Mr. Steele, who carried it away.

Wa-ba-shaw says in his testimony that, "Governor Ramsey gave him the money, but that Jack Frazer and Mr. Steele took it and carried it away; that Jack Frazer told him that the bag contained two thousand and nine hundred dollars; that that was all the money Governor Ramsey gave him on that day; that there had been other money paid to the tribes before that time, (meaning the 'annuity' money,) but this was paid to the chiefs—seven portions in all; that his portion was \$2,900, and that that was all the money paid to him at Fort Snelling; that he signed a receipt for this money, and supposed he was to receive it; that some person asked him the question 'if Jack Frazer was to have this money,' to which he said, 'no;' that Mrs. Finley, who was the interpreter, then repeated something to Governor Ramsey, which he supposed was his answer; and that he then presumed that Governor Ramsey was satisfied that he was to have the money."

Wah-coo-ta says, "that Governor Ramsey came in with two sacks of money, and laid them upon the table—one for Wah-ba-shaw, and one for himself—a sack for each; that his nephew (Jack Frazer) then took the money, and Mr. Steele carried it away; that the sacks contained three thousand dollars each, but the money was not counted; that he saw the sacks upon the table, but never touched them; that the same persons who got Wa-ba-shaw's money got his also; that he did not give his money to Jack Frazer; that he went twice in company with

Wa-ba-shaw last winter and demanded this money from Mr. Steele, but that Mr. Steele would not let them have it. Governor Ramsey laid one of the bags of money down to me, and one to Wa-ba-shaw, but Jack Frazer and Mr. Steele carried them away."

This is the testimony of the Indians. It is simple, but conclusive.

Mr. Steele admits that he received the money, but insists that he received it from Jack Frazer; and that he has accounted to Jack Frazer for it. He also attempts to show that the money was given to Jack Frazer by these chiefs; but they both deny that they ever made any such gift or disposition of it. Wah-coo-ta says that he was told that it was given to Mr. Steele to be kept for them. One thing is certain, that they have never received any portion of it according to the evidence. Near six thousand dollars in gold thus filched away from these old respectable chiefs by a "half-breed," and no remedy!

Such are the charges—such is the evidence, so far it has been stated; and the following are, in our judgment, some of the inferences fairly deducible from them under all the circumstances presented for our investigation.

1. That the traders rendered essential services to the commissioners in the making of these two treaties; that there was an understanding between them and the commissioners that their claims upon the Indians were, in consideration of these services, to be provided for and paid, and to the extent of the amounts subsequently received by them, as mentioned in the testimony; and that the payments as made by Governor Ramsey were in accordance with the views and suggestions of the then Commissioner of Indian Affairs, (Luke Lea,) who was also one of the commissioners at the treaty.

2. That the amounts thus to be provided for and paid to the traders were frequently spoken of and explained to the Indians, and admitted by them, or the majority of them, to be correct a short time before the treaties were signed; and even much larger sums than were provided for by the commissioners. But that these acknowledgments and admissions were obtained from the Indians by representations made to them by the traders themselves, without their having any definite knowledge or understanding of the extent, magnitude, or correctness of the alleged indebtedness.

3. That at the time of the signing of the "Traders' Paper" by the Wah-pa-toans and See-see-toans on the 23d of July, 1851, (the day the treaty was signed,) but a very few, if any, of the chiefs knew what they were signing, and that it was not on that day, or ever afterwards, explained to them, and assented to in "open council," as required by the treaty stipulations.

4. That after these treaties were made, an influence adverse to the payment of the old debts of the traders, *as provided for at the treaties*, manifested itself in the country. It had a decided effect upon the conduct and disposition of the Indians towards their old traders; and that in consequence of this hostile influence against their interests, means, unjustifiable, and in some instances oppressive, were resorted to to counteract it; which were contrary to the treaty stipulations, the law making the appropriations, and our other obligations due towards the *Indians*.

5. That some time after the treaty was made with the Upper See-toans and Wah-pa-toans, on the 23d July, 1851, they sent a large deputation of their chiefs and braves to St. Paul to express their dissatisfaction to Governor Ramsey and Agent McLean, of the arrangement which had been made with the traders for the payment of their debts at the treaty, and to protest in the name of their nation at large against such a disposition of their money; and demanding its payment into their own hands.

That both Governor Ramsey and Agent McLean agreed to comply with their wishes, solemnly, and in "open council" on that occasion, and so reported the facts and their requests to the Indian Department at Washington. And that Governor Ramsey subsequently refused to comply with his promises thus made, and paid over the money to Hugh Tyler, contrary to their wishes and the treaty stipulations, for the benefit of the "traders" and "half breeds," according to the arrangement as originally made by the "Traders' Paper."

6. That the views as expressed by Governor Ramsey and Agent McLean in that report, of December 13, 1851, in relation to the proper construction of the stipulations contained in the treaty of July, 1851, are the views entertained by us in that respect, and upon which this report is predicated.

7. The most of the witnesses give it as their opinion, that if this money had been paid directly to the Indians as requested by them, and they had been left to themselves in regard to its disposition, that it would have been squandered for horses, trinkets, and the means of dissipation; and that but a very small amount of it would have been paid towards the extinguishment of their debts, or reserved for the expenses of their removal and subsistence. But it is conclusively shown by all past experience, in the history of the affairs of the Indians upon our frontiers, that they would not have been left to themselves, but that the greater part of the money would have passed *rapidly* into the hands of the *white men*—justly, perhaps, in some instances, but irrespective of the rights and interests of the Indians as a general rule—and that their own "half-bloods," would have been used as the "*instruments*" of this general pillage.

The fate of Wa-ba-shaw and Wah-coo-ta affords a striking illustration, on a small scale, of what might have been expected on a more extended one.

But whether the Indians would have made a provident or improvident use of their money, it was our duty to have paid it to them if they were entitled to it by the treaty stipulations.

8. A majority of the witnesses are also of the opinion that the testimony of the Indians is not reliable in cases where gain or profit is expected, or where they testify under strong bias or prejudice. This may be said of white men as well as of Indians; and hence interested parties are excluded by law in our courts of justice. But we are satisfied from our own observation of Indian character, as well as from the testimony of the witnesses, that it is not to be depended upon, like that of respectable white men.

We have thought it right, nevertheless, to examine the chiefs, for the purpose of ascertaining their views and feelings in regard to these pay-

ments, and the appliances used to bring them about, and have attached credence to their statements only when they have the appearance of truth, and circumstances, or other respectable evidence to sustain them. Mr. Bailey says, that he does not rely much upon Indian evidence when they expect to gain by it; but that when left to themselves they are equal to white men. But that it is almost impossible to keep them from such influences.

9. That a very large sum, amounting to \$55,250, was deducted and retained by Hugh Tyler, by way of discount and per centage, on the gross amount of payments; which, it would seem, could not have been necessary for any reasonable or legitimate purpose, but which is not accounted for by the witnesses, and that these exactions were made both from "traders" and "half-breeds," without any previous agreement in many instances; and in such a way, in some, as to make the impression, that unless they were submitted to, no payments would be made to such claimants at all.

10. And, *finally*, it is evident from the testimony and the circumstances, that the money was not paid to the "*chiefs*," either of the See-see-toan and Wah-pa-toan, or Mad-a-wah-kan-toan bands, "*as they in open council requested*," according to the stipulations of the treaties, and the law making the appropriations. But that Governor Ramsey steadily refused so to pay it; and threatened, if they would not consent to its payment to the traders, to take or send it back to Washington. That by the withholding of their "*annuities*," and the use of other appliances, mentioned in the testimony, the Indians were in the end compelled to submit to the arrangements as they were made by him, although contrary to their wishes. And that after all, there appears to have been a want of acquiescence among the Wah-pa-toans and Sec-see-toans, as only *two* out of the *seven* old chiefs signed the receipt for the two hundred and fifty thousand dollars. The receipt was, nevertheless, also signed, as appears by the evidence, by *four* of the younger chiefs.

Now, whether this money would have been squandered or not, if paid directly to the Indians—still, if such were our treaty engagements with them, we were bound in justice and in honor to have paid the money according to our contracts.

For, although it may be true, as remarked by the Hon. Luke Lea in his testimony, that "they have very imperfect ideas of the value and proper uses of money or land, yet the government assumes that they have, so far, a competent knowledge of both, as to make them the subjects of the most solemn contracts."

All which is respectfully submitted.

RICHARD M. YOUNG.

To the Hon. GEORGE W. MANYPENNY,
Commissioner of Indian Affairs.

NOTE.—When this report was prepared, after my return from the Minnesota Territory, it was expected that Governor Gorman, with whom I was associated in the investigation, would have been here in time to have signed it also, during the fore part of the present session of Congress. But it being now probable that his official duties will detain him at St. Paul until perhaps the month of March, I have thought it advisable to send the report in as it is, with my own signature, being well assured that every portion of it will be found to be sustained by the evidence, and in the confident belief that Governor Gorman would have signed it, if he had been here.

RICHARD M. YOUNG.

TESTIMONY
OF THE
WITNESSES EXAMINED BY THE COMMISSIONERS,
SPECIALLY

Appointed by the President to investigate the charges preferred against the Hon. Alexander Ramsey, late Superintendent of Indian Affairs of the Minnesota Territory, relative to his exchanges and disbursements of the public money appropriated by the first section of the act of Congress of August the 30th, 1852, for the fulfillment of the stipulations contained in the fourth articles of the treaties made with the Da-ko-ta or Sioux Indians, at Traverse des Sioux and Mendota, on the 23d of July, and 5th of August, 1851, taken at St. Paul, Minnesota Territory, commencing on the sixth day of July, and continuing, from time to time, until the seventh day of October, 1853, as well on the part of Governor Ramsey as the United States, the witnesses having been all duly sworn by competent officers of the Territory previous to their examination.

Lafayette Emmett, esq., attorney general for the Territory, attended as counsel for the United States; and the Hon. David Cooper, and J. Van Etten, esq., as counsel for Governor Ramsey:

Governor Ramsey being also personally present much of the time, and occasionally taking part in the examination of the witnesses.

The evidence is as follows:

THE EVIDENCE.

WARREN WOODBURY, sworn and examined as a witness.

Question. Please state your age, and present place of residence.

Answer. I am thirty-five years of age, and reside on the west side of the Mississippi river, opposite to the town of St. Paul.

Question. State whether you are related to any of the Sioux bands of Indians, and if so, to what band, and how are you related?

Answer. I am related to the Lake Calhoun band, by marriage with a half-breed woman.

Question. State whether you were present in November last at a council held by Governor Ramsey with the lower bands of Indians at Fort Snelling, relative to the payment of the money due under the late treaty with the Sioux Indians?

Answer. I was present at such a council at the interpreter's house, and also at Mr. Sibley's house in Mendota. The one at Mr. Sibley's house was held first.

Question. What was said by Governor Ramsey and the Indians at Mendota relative to the payment of the money?

Answer. Governor Ramsey went on to say that, if they could come to some terms about paying their honest engagements, that he was ready to make the payment. The Indians then demanded the money to be paid into their own hands. He objected to paying it into their own hands. He said if he paid it into their own hands, that they would not pay their debts. He talked as if they did not come to some agreement, and would insist to have it paid into their own hands, that he would not pay them at all. He said that the Indians were not as they used to be; that now they could not be relied upon; that every little thing changed them. He then went on to say that the white men considered it dishonest to defraud each other and cheat their creditors of their just dues.

He then referred them to the other bands of Indians below. He said that they had acted like good children, and that he was ashamed of the Sioux, who only had wronged any one out of their honest debts. The Indians still demanded the money to be paid into their own hands, said they could pay their own debts, and did not want to cheat any one.

Question. What did Governor Ramsey reply to this demand?

Answer. He told them they had better consult with each other, as time was advancing, and it was getting late; and if they would come to some terms, he would pay them another day, or the next day, (meaning their "*annuities*.")

The Indians replied that they wanted the money in their own hands; that they had been detained a long time, and were in a state of starvation, and wanted to go home.

Question. State whether the Indians at this council informed Governor Ramsey whether they had determined among themselves, "a council," how they intended to dispose of the money set apart for the payment of their debts.

Answer. The Indians said they wanted the money paid into their own hands, and that they would then pay to whom they owed, or to whom they saw fit.

Question. State whether Governor Ramsey paid them the money at that time, according to this demand. I mean the money appropriated by the treaty to settle their affairs, and to provide for their removal and subsistence.

Answer. He did not pay it to them at that time. He told them when they met again with him they must come to some terms; that he should not meet them again until they sent for him.

Question. Did they appoint a place at which to meet again?

Answer. I do not remember. The governor said he preferred meeting at "the agency."

Question. Please state what transpired at the council at the agency to which you have referred.

Answer. Governor Ramsey asked them if they had come to any conclusion among themselves about the payment of the money.

Question. What did the Indians say in reply?

Answer. They said that if they could not receive their money in their own hands, according to the stipulations of the treaty, and pay it out in council, as they wished to do, they wanted to go home. ~~Go~~

ernor Ramsey then answered something, when one of the chiefs got up and made a long speech ; and after the chief was done speaking the governor said to the interpreter, that if they could not come to some terms as to how they wanted the money to be paid out, that *he would make a proposition* to them. *It was this* : He proposed to set off twenty thousand dollars for their subsistence and removal money, twenty thousand dollars for their half-breed relations, and to reserve seventy thousand dollars to pay their old debts. He said that the twenty thousand dollars for the half-breeds he would pay to the chiefs and braves, and that they could then pay it to the half-breeds in council, as they might think proper. Wa-ba-shaw then got up and said, you have got our lands and now we want our money, or pay for them, as it was agreed upon ; or you can keep your money, and we will keep our lands and go home. Governor Ramsey replied, that if they did not comply with *his wishes*, he would send or take the money back to their great father at Washington ; to which Wa-ba-shaw said, he might take it back, and they would keep their lands. At this, Wa-ba-shaw went out, and the rest of the Indians followed him.

Question. State, as well as you can remember, what chiefs and headmen of their bands were present at that time.

Answer. Wa-ba-shaw, Red Wing, Little Crow, Good Road, Mock-pee-we-chas-ta, Grey Iron, and Black Dog, were the chiefs present. Red Bird and Little Star are also chiefs among them, but the government does not recognize them as such. There were also fifteen or twenty headmen present.

Question. How many of each band generally attend their councils ?

Answer. There are generally four or five.

Question. Were the principal chiefs and headmen present at this council ?

Answer. All the chiefs and most of the headmen were present.

Question. Were you present when the treaty was made with these bands, (the 5th of August, 1851 ?)

Answer. I was present.

Question. State whether either of the commissioners who negotiated that treaty at Mendota explained to the Indians that clause of the treaty which provides for an appropriation of money to pay their just indebtedness, and, if so, how did they explain it ?

Answer. Commissioner Lea told them, that the amount they were to receive to pay their just engagements or indebtedness would be paid to them into the hands of the chiefs and headmen in council, to be paid by them to whomsoever they saw fit.

Question. Did the Indians ask him to explain this clause to them ?

Answer. I do not know ; but he so explained it to them.

Cross-examined by Governor Ramsey and counsel.

Question. Have you been in the habit of drawing from the "annuities" of the Indians ?

Answer. My wife and children have. I have three children.

Question. How much have you generally received ?

Answer. About four dollars and a half each year under the old treaty. Last fall I received about twenty dollars under both treaties.

Question. How long have you drawn "annuities" ?

Answer. My wife and children have drawn "annuities" ever since they were born.

Question. Were you present during the whole council of which you have spoken ?

Answer. I was.

Question. Who were the chiefs who demanded the money to be paid into their own hands ?

Answer. Mock-pee-we-chas-ta and Wa-ba-shaw both demanded it.

Question. Have you heard the chiefs, besides these two, express themselves as to how they wanted the money to be paid ?

Answer. I know that there was some confusion and difference of opinion about it.

Question, by Governor Ramsey. Do you remember to have heard any of the Indian chiefs say in council that they did not know how to do business, and that they either wished me to pay their debts or to appoint some person they could trust to do it for them ?

Answer. I do not remember whether they asked you to do so, or to appoint some one they could trust.

Question. Do you remember which chief it was that addressed me in that manner ?

Answer. I do not. I do not recollect whether it was Little Crow, or not.

Question. Do you know whether Good Road addressed me in the way or not ?

Answer. I do not.

Question. Do you remember whether it was or not ?

Answer. I do not.

Question. Do you not know that some chief said so ?

Answer. I do.

Question. Do you not know that there were two parties in that council ; one for paying their debts and the other for receiving the money into their own hands ?

Answer. I know that there was a difference of opinion among them. There was a portion who wanted to pay their debts themselves, and another portion who wanted the American Fur Company, or some one else, to pay the debts for them.

Question. Was there not an effort made outside to induce them to take this money for their half-breeds, and not to pay their debts ?

Answer. I do not know that any one told them not to pay their debts. I said to them myself, that I thought it would be best, if they could get the money, to pay one-half to the traders, and the other half to the half-breeds, and that the traders would be well paid at that.

Question. When in that council, there being a difference of opinion among them, at the time I proposed the compromise to reserve some of the money for removal, some for subsistence, and some for their half-breed relatives, did not Wa-ba shaw arise and demand that I should pay the whole of it to them ?

Answer. *He did.* You proposed twenty thousand dollars for removal and subsistence ; twenty thousand dollars for the "half-breeds ;" and seventy thousand dollars to pay their old debts. Wa-ba-shaw then

said, that if he could not get the whole of it, as stipulated in the treaty, he would keep his lands, and Governor Ramsey might keep his money. To this Governor Ramsey replied, if you don't comply with my wishes, you shan't have anything, and I will take the money back to the great father, at Washington—Wa-ba-shaw then said, keep your money, and I will keep my land.

Question. To what band of Indians do you belong?

Answer. I belong to the Mock-pee-we-chas-ta band, or Lake Calhoun Indians.

Question. Were you present when you received your "half-breed" portion of the money?

Answer. No, I was not present.

Question. Did your chief get his portion of the twenty thousand dollars, which was given to the chiefs?

Answer. They were in the act of making payments when Governor Ramsey came in, and we were then all sent out. During that time, he paid the chiefs about \$2,853 dollars each.

Question. Was this conversation at the several councils explained by an interpreter?

Answer. It was. William H. Forbes and Alexander Farribault were the interpreters.

Question by government commissioner. At these councils of which you have spoken, did the Indians propose to have suitable persons appointed to investigate the correctness of the traders' accounts before payment?

Answer. I did not hear it in council.

Question. Did you hear them say so in the presence of Governor Ramsey?

Answer. I do not know that he was present.

Question. Who spoke in these councils as the head chief of the band?

Answer. Wa-ba-shaw.

Question. You state that Little Crow, or some other Indian, whose name you do not remember, proposed that either Governor Ramsey, or some person to be appointed by him, should pay the money due to the traders for them. Now, was this suggestion made before or after Governor Ramsey refused to pay the money to the Indians themselves, as demanded by Wa-ba-shaw?

Answer. It was after he had refused to pay the money as demanded by Wa-ba-shaw.

Question. Was there any difference of opinion, or confusion among the Indians until Governor Ramsey had refused to pay the money as demanded by Wa-ba-shaw?

Answer. There was some difficulty from the first. Some wanted to pay the money to the traders, while others spoke of their children. I have been speaking now of the council held at Mendota.

Question. Did you know of any influence at work at the time of this council, to induce the Indians to leave the money with Governor Ramsey, to be by him paid over to the traders?

Answer. The Indians said that the fur company, or traders, wanted them to leave the money with Governor Ramsey to pay their claims, after the Indians had received their annuities.

Question by Governor Ramsey's counsel. Was Governor Ramsey present at this time?

Answer. He was not present. He was at home in St. Paul, and this was in Mendota.

Question by government commissioner. Was Governor Ramsey present when efforts were made to induce the Indians not to pay their debts?

Answer. Not to my knowledge.

—

WA-BA-SHAW, a chief of the Wa-ba-shaw band of the Med-a-wa-kan-toan Sioux Indians, sworn and examined as a witness. Alexis P. Bailey and William Henry Forbes sworn as interpreters.

(Wa-ba-shaw is recognized as the principal or head chief of the seven Med-a-wa-kan-toan bands.)

Question. Do you understand the nature and obligation of an oath as administered in the courts of white men?

Answer. I do.

Question. Are you the chief of what is known as the Wa-ba-shaw band of the Med-a-wa-kan-toan Sioux Indians?

Answer. I am.

Question. Did you at Fort Snelling demand of Governor Ramsey payment of the money due to the Indians under the treaty stipulation of August 5, 1851, into your own hands?

Answer. Yes.

Question. Do you know how much money was due to the Med-a-wa-kan-toan bands, and also to the Wah-pa-koo-ta band, to provide for the payment of their debts and their removal and subsistence at the treaty concluded at Mendota, August 5, 1851?

Answer. I cannot tell exactly. You cannot expect an Indian who can neither read nor write to answer explicitly in regard to such large sums of money.

Question. Do you know how much was due to the chiefs and head men of the Med-a-wa-kan-toan bands?

Answer. I do not know exactly.

Question. Did the chiefs have a council as to how the money should be paid?

Answer. Yes.

Question. Did you tell to Governor Ramsey what the Indians "council" had concluded upon?

Answer. Among the Indians we have not the means of keeping a correct account of things; a good many days and nights have elapsed since then, and I cannot well recollect the circumstances.

Question. Did you ask Governor Ramsey for the money?

Answer. Yes.

Question. What did he reply?

Answer. Governor Ramsey told me he had received a letter from our great father; the letter he received, he said, was about the land our great father asked for.

Question. Who was the interpreter when you came to Governor Ramsey?

Answer. Mr. Prescott.

Question. Where does Mr. Prescott reside?

Answer. At that time he lived at Fort Snelling; at the time we came here, *he happened* to be here also.

Question. Where is he now?

Answer. He lives above Fort Snelling, where there is a "water-fall," called the "Little Falls."

Question. Now go on and repeat what your conversation was with Governor Ramsey.

Answer. Governor Ramsey said, in reference to the letters, that they were about the new country at Little Rock. He said your great father wishes to have that included in the country already bought from you, and pay you money for it. Your great father's young men are going to live in the country now ceded, and being near to where you are going, they would fear you, is the reason why he wishes to have that country also ceded. Governor Ramsey said this, and told me to look towards the rising and setting sun, and look for a country I wished. If you do not accede to the request of your great father, you will know no good hereafter. I then had a council with the seven chiefs of the Med-a-wa-kan-toan bands, and I stated to them the wish of our great father, and advised them to look out for a new country.

Question. Did Governor Ramsey talk to you through an interpreter?

Answer. Yes; Mr. Prescott.

Question. Where was the council held?

Answer. At Governor Ramsey's own house, and the doors were closed.

Question. Commence at the time you went to Fort Snelling to get the money, after the ratification of the treaty.

Answer. I asked Governor Ramsey for that money, from time to time, for a month and a half.

Governor Ramsey here requested Wa-ba-shaw to explain.

Wa-ba-shaw.—I mean that I waited for a month and a half, but there was a great deal of talk and commotion about the matter. I asked but twice for it during that time.

Question. Through what interpreter did you ask Governor Ramsey for the money?

Answer. Mr. Alexander Farribault, both times.

Question. When you asked Governor Ramsey for the money, what did he say?

Answer. When I asked him for the money, he said no; your great father says you must pay your debts.

Question. Did he ever afterwards pay you the money?

Answer. He never paid me any.

Question by Governor Ramsey. Do you mean to say that I never paid you any money?

No answer.

Question. Did Governor Ramsey ever pay you any money under the treaty?

No answer.

Question. Did Governor Ramsey pay you any money at Mendota, of the money set apart for the chiefs?

Answer. Governor Ramsey paid me money, but they took it away.

Question. Who do you mean took it away?

Answer. Governor Ramsey paid money to me, but what he gave to me Jack Frazer took away from me.

Question. Did Jack Frazer take all the money the governor paid you?

Answer. The money the governor paid me was laid upon the table, and Mr. Steele took it away.

Question. Did Governor Ramsey pay you any other money than that which Mr. Steele took away?

Answer. I do not remember of any more.

Question. Did the governor say how much was due to the traders?

Answer. The governor always told us we should pay our debts, and he mentioned \$70,000 as the amount we should pay to the traders.

Question. What amount was it that Governor Ramsey paid you which Jack Frazer took away?

Answer. Jack Frazer told me my share was \$2,900.

Question. Who was the interpreter?

Answer. Mrs. Finley.

Question. Was that all the money Governor Ramsey paid you that day?

Answer. That was all.

Question by Governor Ramsey. Had I paid you any money before?

Answer. There had been money paid to all the tribes, but the money that was paid on that day was paid to the chiefs; \$2,900 was my portion—there were *seven* portions.

Question. Was that all the money that Governor Ramsey paid you at Fort Snelling?

Answer. That was all.

Question. Did you sign a receipt to Governor Ramsey for that money?

Answer. I signed a receipt because I supposed I was to have the money. The question was asked me: "Was it for Jack Frazer?" I said no. Mrs. Finley then repeated something to Governor Ramsey, which I supposed was my answer, and I presumed that the governor was satisfied that I was to have it.

Question. Did the chiefs of the Med-a-wa-kan-toans hold a council on the subject of the payment of their debts?

Answer. They held a council, and the chiefs were not willing to pay their debts otherwise than to draw their money first and then pay for themselves afterwards.

Question. Was that money so paid to them?

Answer. We could not get it.

Question. Why did you sign the receipt for the \$70,000?

Answer. When I found that I could not get the money, as I wanted it, in my own hands, I was advised by our half-breed relatives, Mr. Rock, Mr. Labatte, Jack Frazer, Samuel Finley, and Anthony Finley, that I had better sign the receipt for the payment to the traders; for, if

I left, the other chiefs would do so without me. I then went up and signed it at Mr. Steele's house, in the presence of Governor Ramsey.

Question by Governor Ramsey. Did you send for me on that occasion?

Answer. I did not. But Jack Frazer and old Rock fixed it. I think they sent for you, but I do not know.

Question. Why was not the whole \$90,000 paid to the traders?

Answer. Twenty thousand of it, I understood, we were to have for our half-breed relatives. Governor Ramsey told me so.

Question. Why was that \$20,000 given to the chiefs for the half-breeds?

Answer. Governor Ramsey said I give you this \$20,000, but you must give some of it to your "half-breed" relatives.

Question by Governor Ramsey. Did you not make the request that the \$20,000 should be given to your "half-breed" relatives?

Answer. No. When you paid us the \$20,000, you then told us to give some of it to our "half-breed" relatives.

Question. Was any part of that \$70,000, which was set apart for the traders, paid over to the chiefs?

Answer. I have not known of any Indian having seen anything of it.

Question. When you told Governor Ramsey you did not want him to pay the traders, and that you wanted to pay your own debts, what did he say?

Answer. Governor Ramsey said that it was the wish of our great father, that the money set apart for the traders should go to the payment of our debts.

Question. Did the traders ask you to sign any paper, at that place, in regard to their claims against you?

Answer. Yes.

Question. What were you informed were the contents of that paper they wished you to sign?

Answer. It was a paper to pay our debts, and they asked us to sign it.

Question. Was Governor Ramsey present when you signed that paper?

Answer. Yes; he was present.

Question. What did the governor tell you the paper was that you were signing?

Answer. It was the paper for the payment of our debts; that was all the paper I was asked to sign.

Question. Did you sign a paper for Mr. Sweetser, at any time?

Answer. I never signed any paper for him.

Question by Governor Ramsay. Were you advised by any one not to pay your debts to the traders?

Answer. Yes; we were so advised.

GIDEON H. POND, sworn and examined as a witness.

Question. Were you a witness to the treaty of the 5th of August, 1851, with the *Sioux Indians*?

Answer. I was.

Question. Were you present when Governor Ramsey made the payment under that treaty to the Med-a-wa-kan-toan bands?

Answer. I was not.

Question. Were you present when he paid the See-see-toan and Wah-pa-toan bands?

Answer. I was not.

Question. Were you present when he paid any money to the Indians?

Answer. I was not.

Question. Were you present when he paid any of the traders?

Answer. I was not.

Question. What do you know about the payments by Governor Ramsey to the Indians?

Answer. I know nothing.

Question. What do you know about a power of attorney executed by the Indians to Governor Ramsey?

Answer. I know nothing.

Question. Were you present when the Indians signed the receipts Governor Ramsey?

Answer. I was not present.

Question. Did you ever hear the Indians demand the money of Governor Ramsey?

Answer. I think not.

Question. Do you speak the Sioux language?

Answer. I do.

Question. Did the Indians make known, at that council, to Governor Ramsey, the manner in which they wished that money to be paid?

Answer. I do not think they did.

Question. Do you know anything of a power of attorney given to Hugh Tyler?

Answer. I do not.

Question. Do you know anything of any payment made to the Indians under this voucher now shown to you?

Answer. I do not, except from hearsay.

Question. Do you know anything of a paper for the payment of \$250,000, or any other sum, having been given to Hugh Tyler?

Answer. I do not.

Question. Did you take any action in regard to the Sioux Indians under the direction of Governor Ramsey?

Answer. I did not.

Question. Do you know anything about the transaction in connection with yourself and Governor Ramsey?

Answer. I do not.

—

MOSES S. TITUS, sworn and examined as a witness.

Question. Were you present when Governor Ramsey made the payment under the treaty of the 5th of August, 1851, to the Med-a-wa-kan-toan bands of Sioux Indians?

Answer. I was present one day, when a part of the money was paid.

Question. Were you present when he made the payment to the See-toan and Wah-pa-toan bands of Upper Sioux?

Answer. I was not.

Question. How much money was paid in your presence, and to whom was it paid by Governor Ramsey?

Answer. He paid it to the Indians; but I do not know how much.

Question. How was the money paid?

Answer. To the Indians individually. Some of it was given to the chiefs independent of the other Indians.

Question. Was anything said about paying the traders at the payment to the Indians?

Answer. Not that I heard.

Question. Did you hear any demand by the chiefs for the money of Governor Ramsey?

Answer. I do not recollect that I did.

Question. Do you know anything about the Indians asking the money to be paid into their own hands, and not to the traders?

Answer. I do not personally.

Question. Do you know anything concerning it from Governor Ramsey and the Indians when together, or from Governor Ramsey alone?

Answer. No.

Question. Do you know anything about the means used by Governor Ramsey to get the receipt for the money from the Indians?

Answer. No; nothing further than that I heard Governor Ramsey tell the Indians that their "great father" wished them to pay their debts?

Question. Had Governor Ramsey any agent at that payment to pay the money for him?

Answer. I think Major McLean was there acting in making the payments.

Question. Do you know who paid the money to the traders?

Answer. I do not.

Question. Do you know anything further about the transaction?

Answer. I do not personally.

Question. What do you mean by not knowing anything personally?

Answer. I mean that I was not present when anything was done.

Question. Was there any council held at which you were present?

Answer. There was.

Question. Where was that council held?

Answer. At the interpreter's house, near to Fort Snelling.

Question. What did the Indians say at that council?

Answer. I heard the Indians say that they had asked Governor Ramsey for the money at other councils, and that he might take it back to where he got it from.

Question. What had Governor Ramsey asked them to do when the Indians made that reply?

Answer. I do not know; I had just come in.

Question. Did you understand from the Indians at that council what was that they were talking about?

Answer. That was all that I heard.

Question. Do you know of any means having been used by Governor Ramsey to induce the Indians to sign the receipts for the payment of their debts to the traders?

Answer. I do not : only that he told them the great father desired them to pay their honest debts.

Question. What kind of money was paid to the Indians in your presence?

Answer. I think all that I saw paid was gold.

Question by Governor Ramsey. Who was the Indian agent at the time this payment was made at Fort Snelling?

Answer. Major Nathaniel McLean.

WA-BA-SHAW recalled.

Question. You said in your examination on yesterday that when you asked Governor Ramsey for the money to be paid into your own hands, he replied that the great father at Washington wished you to pay your debts ; to which you answered, that you wanted to pay your own debts. What did Governor Ramsey then say to you?

Answer. Governor Ramsey then said, I will take the money back to the great father.

Question. What did you say to that proposition?

Answer. I answered and said that neither of us would then say any more about it, and let it rest where it was.

JONAS PETTIJOHN, sworn and examined as a witness.

Question. What is your age and present place of residence?

Answer. I am forty years old, and reside at Traverse des Sioux. I have lived among the Indians eight years next October. I lived at "Lac qui Parle" from the 28th of October, 1845, until the 23d of February, 1852, and from then until the present time at "Traverse des Sioux."

Question. Were you present at a conversation last fall between Governor Ramsey and the See-see-toan and Wah-pa-toan bands of Sioux Indians at "Traverse des Sioux," in relation to the payment of the money under the late treaty with these bands, and if so, what transpired at that council or conversation?

Answer. I was present at one council held during the payment. When I entered the room an Indian commenced speaking about their "*hand money*" about to be paid. From what I could learn they wanted it paid to themselves, as they understood the treaty. They had a paper drawn up making a dividend of that money, and presented it to Governor Ramsey. They had named a number of Indians and half-breeds, and the sums they desired for each one to have. That is about the amount of what I remember they said to the governor. Quite a number of chiefs and headmen were present.

Question. How many of the Indians spoke to that effect?

Answer. I should think about a half a dozen; and among them Mah-zah-shah, or Red Iron, Mock-pee-wee-chas-ta, or Cloudman, and E-yang-mo-nee, or Running Walker. There were others who spoke also, but these are all the names I now remember.

Question. State whether Governor Ramsey acceded to their demands or proposition, and if not, what did he say?

Answer. He did not accede to their demands. The first remark made by Governor Ramsey in reply was, that they were not the only Indians with whom the United States had made treaties; that they had made treaties with the Med-a-wa-kan-toan bands of Sioux, with the Chippeways and Winnebagoes, and with several other tribes he mentioned. He said that the Med-a-wa-kan-toans had paid their debts in 1837. He named the amount, but I cannot now recollect what it was; but I think it was near \$90,000; and that under the treaty of 1851 they had again paid another amount, and that he thought they ought to pay their traders also; that he had no doubt but that they owed their traders, and as honest men ought to pay their debts; that it was very true that they could not have so much money; but that they had better pay their debts and have a little money, than to have a great deal of money and not pay their debts.

Question. What did the Indians say about paying their debts?

Answer. They did not refuse to pay their debts, but wanted the money first paid into their own hands, so that they could pay the debts themselves.

Question. Did the council then break up?

Answer. I think it did soon afterwards; but something was said about a paper given to Governor Ramsey to pay the money over himself; and some of the chiefs denied having signed it. Mock-pee-we-chas-tah, or Cloud Man, was the only one who denied having signed it.

Question. Was this before or after Mah-yah-shah, or Red Iron, had been arrested or imprisoned by Governor Ramsey?

Answer. It was after he had been arrested.

Question. Who are the head chiefs of the See-see-toan and Wah-pa-toan bands of Sioux Indians?

Answer. Mock-pee-wee chas-tah, or Cloud Man, E-yang-mo-nee, or Running Walker, Ish-tah-hum-bah, or Sleepy Eyes, and Mah-zah-shah, or Red Iron.

Question. Who were present at the council besides Governor Ramsey, yourself, and the Indians?

Answer. Alexander Huggins, Alexander Farribault, Alexis Bailey, (pronounced Bayè,) Charles D. Fillmore, Franklin Steele, Hercules L. Dousman, Henry H. Sibley, Mr. Tyler, were present; but Joseph R. Brown, Mr. Campbell, Mr. Prescott, and Doctor Borup, were not present. The paper spoken of, making the distribution, was brought in by Hanock. Most of those who attended the payment were present, but I don't know certainly.

Question. Did you see any of the payments made to the traders at this time?

Answer. I saw nothing but the "*annuity*" money paid.

JONAS PETTJOHN, cross-examined by Governor Ramsey and counsel.

Question. From your knowledge of the character of these Indians, what do you think they would have done with the money; if \$275,000 had been paid into their own hands, would they have paid their debts with it, or not?

Answer. They would have bought up all the horses they could have found; I do not think they would have paid their debts; I think they would have gotten clear of their money in a very short time. That is what I think of it.

Question by government commissioners. Do you think they would not have paid their debts, as they proposed to do upon the paper presented to Governor Ramsey?

Answer. I think it doubtful even about that.

Question. Do you think that the chief Mah-zah-shah, or Red Iron, would have been unwilling to have paid their debts, according to the proposition contained in the paper before spoken of?

Answer. I think it probable that he might have done so, but some of the rest I do not think would.

Question. When you speak of other Indians, what Indians do you mean?

Answer. I mean more particularly the Indians who are considered the principle men.

Question. Which of those chiefs spoken of yesterday do you mean would not have paid their debts?

Answer. I think it doubtful whether any one, besides this man Red Iron, would have paid their debts, according to the distribution made on that paper.

Question. Tell us why you think so.

Answer. I speak from my knowledge of Indian character, and not from the character of the individuals mentioned.

Question. How then do you account for the traders trusting them from year to year?

Answer. I do not know that I have to account for that. I know that the traders *do* trust them from year to year.

Question. Are white men in the habit of paying debts, when of twenty or thirty years' standing?

Answer. I do not know. From my own knowledge, I have never known a debt of that kind to be presented to a white man for payment.

Question. Did you have any claims against these Indians?

Answer. The "mission" had some claims against them, but I had none.

Question. Are the Indians in the habit of selling their furs to the traders?

Answer. Yes.

Question. Does this trade extend to buffalo robes and deer skins?

Answer. It does. They nevertheless keep a part of these skins for their own use.

Question. Have you been intimate with any of the traders?

Answer. I have been intimate with Martin McLeod.

Question. At what place was he doing business as a trader?

Answer. At "Lac qui Parle."

Question. Is he reputed to be an agent of the American Fur Company?

Answer. I think not; but his "outfits" are from the fur company, as I understand it.

Question. Do you know of the American Fur Company getting these robes and skins?

Answer. They were taken at Mr. Sibley's and Martin McLeod's.

Question. How many of the Sec-sec-toans trade at "Lac qui Parle" annually?

Answer. I know that Martin McLeod has an extensive trade with them.

Question. Was there any treaty ever made with the Sec-sec-toan Indians before, to your knowledge?

Answer. Not to my knowledge; none that was ratified.

Question. Do you know anything about the indebtedness of the Indians to Martin McLeod?

Answer. Not certainly.

Question. Are you acquainted with the members of the American Fur Company?

Answer. I do not know who are the members.

Question. How long have you known Martin McLeod as a trader at "Lac qui Parle?"

Answer. From the fall of 1846 to 1852. He is still a trader there. I arrived there in 1845, and he was not there at that time, but came afterwards.

Question. Were you frequently at McLeod's store?

Answer. I was frequently there.

Question. What was the value of the goods brought there annually?

Answer. It would be running too much risk to give anything like a definite statement.

Question. Were the Sec-sec-toans receiving "annuities" from the year 1841 to 1846?

Answer. They were not.

Question. Who else were traders at "Lac qui Parle?"

Answer. There were no regular traders there, but occasionally others, with small outfits.

Question. Was Joseph Renville a trader there?

Answer. He was, when I first went there; but he died the spring following.

Question. Had he any successor?

Answer. He had not?

Question. Was J. B. Farribault a trader there?

Answer. He was not.

Question. Was Alexander Farribault a trader there?

Answer. No.

Question. Was Joseph Laframbois?

Answer. No. I think that Mr. Farribault was in company with Mr. McLeod for one season; and Mr. Laframbois for one season. I know a Mr. Provincelle, but he was not a trader.

Question. Was Joseph R. Brown a trader there?

Answer. He traded on the upper Stone Lake. H. H. Sibley, Alexis Bailey, H. L. Dousman, and R. McKenzie were not traders at that place.

Question. What kind of goods were usually taken to "Lac qui Parle," for the Indian trade there?

Answer. Indian clothing, tobacco, powder, trinkets, &c.; usually heavy articles.

Question. How were such goods usually transported?

Answer. They were transported from "Traverse des Sioux" to "Lac qui Parle" by land, in carts and wagons.

Question. How many wagons and carts were usually employed?

Answer. Sometimes from twenty-two to twenty-three in number in sending his furs down.

Question. How many wagons and carts were employed in bringing up goods to the trading post?

Answer. About as many as he sent down.

Question. What kinds of skins and furs were obtained at that place, in the course of the trade with the Indians?

Answer. Except for a few seasons, the trade was chiefly for buffalo robes; in other years, besides the buffalo skins, the trade would extend to the skins of martins, coons, badgers, a few beavers, some otter, muskrat, mink, wolf, and fox skins.

Question. What are the usual prices for such skins as you have mentioned?

Answer. Buffalo skins, \$3; otter skins, \$4; beaver, \$4; martin, \$2; coon, 50 cents; badger, 50 cents; mink, 50 cents; wolf, 50 cents; fox, 50 cents; deer skins, \$1; muskrat, 8 cents, &c.

Question. Do I understand you to say that the carts which took the skins and furs down numbered as many as from twenty-three to twenty-five some seasons. If so, how did these carts return back loaded?

Answer. They generally came back loaded with goods and provisions. Some might have come back empty, but they generally brought something.

Question. Is this statement, as made by you, the usual course of trade among the Indians?

Answer. It is at "Lac qui Parle;" that is the only trading post I am acquainted with.

Question. How many pounds in weight would one of the carts described by you transport at a single load?

Answer. I think Mr. McLeod averaged them at about eight hundred pounds each; some would carry more and some less.

Question. What proportion of the return load would be in provisions?

Answer. On some trips the proportion in provisions would be very large, and at other times but small.

Question. How many men were there, depending upon their supplies of provisions at that post, besides the Indians?

Answer. The average number was about four or five, besides women and children. Mr. McLeod had a man there with his wife and family, with his own family, a part of the time.

Question. Do you think, for the time that you were there, that as much as \$200,000 in goods and provisions were sold to the Indians?

Answer. I do not know.

Question. Do you know how many traders there were with the Sec-sec-toans during the six years you were there?

Answer. I do not.

Question. Are you acquainted with the probable value of the skins and furs purchased in the course of trade at Lac qui Parle annually?

Answer. I think some seasons that it amounted to several thousand dollars. Two years, I think, it went up as high as three thousand dollars, and perhaps more than that. During these years there were a great many buffalo.

Question. Do you know how the \$800 paid to the "missionaries" was contracted?

Answer. It was brought in a bill for damages, on account of cattle the Indians had killed.

Question. Was it the custom of the traders at that post to credit the Indians for goods and provisions?

Answer. It was. What pay they received was in furs and skins.

Question. Do you know the number of the Wah-pa-toan bands?

Answer. I do not.

Question. Do you know the amount of the claims presented against the Indians at "Traverse des Sioux?"

Answer. Nothing definite.

Question. Were you acting as agent for the collection of this money for the American board of missions?

Answer. I got my release from the American board in February, 1852.

Question. Do you know anything of a power of attorney given to Hugh Tyler by the traders?

Answer. I do not.

Question. Is it your opinion that there were ever as much as \$200,000 in goods in that upper Indian country?

Answer. Not to my knowledge. I mean with the Indians with whom Mr. McLeod traded.

Question. Was there any trading post between Lac qui Parle and Traverse des Sioux?

Answer. Yes, that of Joseph Laframbois, who was also a trader.

Question. Was there any other?

Answer. None on the Minnesota river.

Question. Who was the trader at Traverse des Sioux?

Answer. Alexander Graham was there.

Question. Was he an agent of the American Fur Company?

Answer. Not to my knowledge.

Question. Do you know for whom he was trading?

Answer. I understood for Henry H. Sibley.

Question. What proportion of the loads of the carts heretofore mentioned by you was in powder and lead?

Answer. I am not able to give an opinion; it might have been a third or a fourth more or less.

Question. In what way are goods usually sold to the Indians on credit?

Answer. The credit is given to them individually.

Question. Upon what does the trader rely for payment?

Answer. Usually upon their furs and skins for payment.

Question. How long did Governor Ramsey keep the Indians waiting at Traverse des Sioux for the payment of their money?

Answer. I think Governor Ramsey was there eight or ten days before he commenced the payments.

Question. Did he not then commence paying a few scattered bands?

Answer. Major McLean made the payments. I mean the "annuity money."

Question. State what you heard Governor Ramsey say, if anything, about the effect of commencing the payment to a few of the Indians only, or what was said by any other person on that subject in his presence.

Answer. I don't remember to have heard Governor Ramsey, or any other person, say anything on that subject.

Question. What kind of provisions, and in what quantities, were they issued to the Indians at that place?

Answer. Benjamin Thompson issued the provisions, under the authority of Agent McLean.

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MAH-ZAH-SHAH, or Red Iron, a chief of one of the Sec-see-toan bands of upper Sioux Indians, sworn and examined as a witness.

William H. Forbes and Alexander G. Huggins sworn as interpreters.

His testimony objected to by Governor Ramsey.

Question. Do you know the nature and obligation of an oath as administered in the courts of white men?

Answer. I do.

Question. What do you consider the most binding form of an oath among the Indians?

Answer. The Great Spirit made all things. We lay our hands upon the sacred writings and appeal to the Great Spirit to bear witness that we speak the truth.

Question. Do you know who made you?

Answer. The Great Spirit made us all, and made all things.

Question. After you are sworn, what is the consequence of not telling the truth?

Answer. The Great Good Spirit would turn us over to the Evil Spirit for punishment.

Question. Do you believe in the existence of a God?

Answer. I do.

Question. Is there any form of an oath more binding upon the Da-ko-ta or Sioux Indians than the oath just taken by you?

Answer. The most binding form is an appeal to the Great Spirit, who made all things, to witness that we speak the truth, (*pointing upwards.*)

Question. Are you the chief of the See-see-toan band of Sioux Indians at Traverse des Sioux?

Answer. I am.

Question. Were you present at the treaty made with the See-see-toan and Wah-pa-toan bands of Sioux Indians at Traverse des Sioux?

Answer. I was.

Question. Do you know anything concerning a *paper* purporting to have been signed by the Indian chiefs at Traverse des Sioux distributing their "*hand money*" among the traders, and if so, state how that paper was obtained, and all you know about it.

Answer. We signed two papers; one, I thought, was to go to our great father, but we were not told what was to be done with the other. We were not told what we signed.

Question. Did the Indians at that time, in "*open council*," request that the money due to them under the treaty for the liquidation of their debts should be paid to certain traders by name, or did they in any other manner designate how that money should be paid?

Answer. They never did. The Great Spirit hears what I say. We would not have given any portion of it to any trader; not even that much, (pointing to the ends of his finger nails.) I had no trader to act for. I had one once, Mr. Provincelle, but he is dead, and I have not said that I would pay him anything. Mr. Provincelle has left a great many descendants, but I have not said that I would pay anything even to them. I insisted upon having the money paid into our own hands.

Question. Was any *paper* distributing this money among the traders interpreted to the Indians at that treaty?

Answer. Mr. Farribault told me about it, but I was unwilling to any such arrangement.

Question. Was any *paper* to that effect interpreted to you at the time of signing it?

Answer. No one told me. E-yang-mo-nee, or Running Walker, O-pe-en-dah, or Big Curley Head, Ish-tah-hum-bah, or Sleepy Eyes, E-tay-wah-ke-an, or Limping Devil, (sometimes called Thunder Face,) Wa-min-day-ne-chah, or the Orphan, and Wah-nok-soon-ta, or the Little Rapids Chief, were there, but none of them told me what it was.

Question. What did you understand that *paper* to be, at the time of signing it?

Answer. I have already said I thought there were two papers; one to go to our great father. If we had been told it was to pay our debts, we would not have signed it.

Question. Were you told, or did you think it was the treaty you were signing?

Answer. We had a *council*, and it was the opinion of all of us that one paper was the treaty. I did not know what was in the other one; we thought it was the treaty. There were a great many "*half-breeds*" standing round, but we did not know that we were signing a paper to give anything to them. The Great Spirit knows that I speak the truth.

Question. Was Governor Ramsey present at this time?

Answer. Yes; there were three agents present: one with his leg

cut off, (Luke Lea, esq.,) Governor Ramsey, and the agent from the fort, (Nathaniel McLean.)

Question. Were you present last fall when Governor Ramsey assembled the See-see-toan and Wah-pa-toan bands, at Traverse des Sioux for the purpose of paying them under the treaty?

Answer. Yes.

Question. State what then transpired.

Answer. Governor Ramsey said that the money he had been after he now had brought there altogether. The chiefs and headmen then held a council, and had a paper drawn up in which was stated the amounts they wished paid for their debts, and the amounts to their half-breeds and presented it to Governor Ramsey, who then said: "Do you want me to give you the country and the money also?" He also told us we had sold our lands, and that our great father wished us to take the money we were to get for it and pay our debts. We did not consent to have that done, and the matter remains so yet. It was our intention to have given something to our *half-breeds* who were brought up among us; but the money was brought down here and paid to others which we did not like. We wished to have had it arranged there *openly*, but it was brought away here and paid without our knowledge. When the money was brought there, there were but *four* chiefs out of *seven* present. We wanted to have the chiefs all together, and proposed in the meantime to go out upon our "*fall hunts*," but our father (Governor Ramsey) was in a hurry and could not wait. E-yang-mo-nee, or Running Walker, Wah-nok-soon-ta, or Little Rapids Chief, E-tay-wah-ke-an, or Limping Devil, and myself (Red Iron) were there; but Wa-min-da-ne-chah, or the Orphan, O-pe-en-dah, or Big Curley Head, and Ish-tah-hum-bah, or Sleepy Eyes, were not present. They then paid the *annuity* money to the *bands* of E-yang-mo-nee and E-tay-wah-ke-an first, and then to my *band*. Wah-nok-soon-ta left without his pay, and came down to the "Little Rapids;" where his *band* was paid last winter. I mean the "*annuity* money." We were paid eleven dollars each, and no one more to my knowledge.

Question. Were you imprisoned by Governor Ramsey, and if so state all about it?

Answer. When I heard that the money had come, I and my warriors were in a hurry to get it; we went together to the place, and there found Governor Ramsey's white soldiers standing around with their guns. We then turned and went back. Governor Ramsey then sent for me, and I refused to go; he sent for me again, and still I refused to go; he sent a third time, and still I refused. I felt bad. The Indians then invited me, and while I was with them, David came with the troops and made me a prisoner. The soldiers then took me to the place where Governor Ramsey was. The governor then asked me why I did not come when he sent for me. I told him that I had come in a hurry to see the money all together, and that his soldiers had refused me admittance; that I felt bad and was ashamed. Governor Ramsey then said, "*I now put you aside as a chief.*" Well, I replied if our great father has told you to do so, it is right. Governor Ramsey then told me to sit down. I answered that I had done no wrong, but as he told me to remain a prisoner, I replied that I would do so.

He then said that he was our great father, and as such he had done so. I remained a prisoner one night. When I came before the governor again, he said, now let your warriors cease their disturbances, and let things be quiet. I said, yes, sir, and left him.

Question. Who was the person that came to you while you were in confinement?

Answer. He said he was sent by the great father to see to his affairs, and I went with him to the governor.

Question. Who was the person who came to you while in prison and released you introduced to the Indians at Traverse des Sioux as a person in authority from the great father, to whom they were to listen?

Answer. All I know about it is heresay from the half-breeds.

Question. Was any other chief broken of his chieftainship but yourself?

Answer. I was the only one I know of.

Question. Do you know of any new chiefs having been made?

Answer. I don't know of any chiefs having been made.

Question. Did Governor Ramsey hold any private councils with the chiefs?

Answer. None that I know of, we never had any.

Question. Was any paper signed in "*open council*" in the presence of Governor Ramsey?

Answer. I do not know personally of any, but I heard of a good deal of talk and feeling among the Indians.

Question. What was this difficulty about?

Answer. During last summer there were a good many new chiefs made, and there was a jealousy between them and the old chiefs. I was not present when these new chiefs were made, but it was said that they were made when they signed the amendments to the treaty.

Question. Was any of your band present?

Answer. There were none of the young men of my band present—not even the dogs.

Question. Did you ever request Governor Ramsey in *open council* to pay the money to the traders?

Answer. I never did. I never told him to pay it to the traders. I requested him to pay it into our own hands.

Question. Was you authorised to speak for the See-see-toan and Wah-pa-toan bands on that occasion?

Answer. I was authorised by all the bands to speak for them.

Question. Did the Indians request Governor Ramsey to hold another council with them, before he paid out the money at Mendota?

Answer. We wanted to hold another council, but he left and went away from Traverse des Sioux.

Question. Was the governor asked to hold another council?

Answer. He said that he would not say any more to us. I asked him to remain, but he would not, and left us.

Question. Did the Indians in *open council* sign a paper protesting against Governor Ramsey's paying the money to the traders, after the governor had refused to comply with their request?

Answer. They signed three papers before agent McLean—one for powder, one for provisions, and one in relation to the money.

Question. Was that in relation to the *annuity* money?

Answer. It was the "*annuity money*."

Question. Did you sign another paper, to be sent to the great father, protesting against Governor Ramsey's paying the money to the traders?

Answer. I don't know anything about it.

Question. Was you at a council held the night before Governor Ramsey left *Traverse des Sioux*, when Mr. Huggins, Captain Dodd, and agent McLean were present?

Answer. Yes.

Question. Who interpreted at that council?

Answer. Joseph Campbell was the interpreter, and was sworn as such.

Question. Was there a paper drawn up on that occasion to be sent to the great father at Washington city?

Answer. Yes. There was a paper drawn up, and the contents of it were a statement that the money had not been paid over to them as they requested, for their traders and half-breeds.

Question. Did the Indians in "*open council*" request Governor Ramsey, when he was present, to appoint persons to examine and investigate the accounts or claims of the traders against them, and to decide upon their extent, correctness, and validity?

Answer. They did ask him, but he made no answer. We again requested him to have some persons appointed to see to the correctness of the traders' claims against us, but he did not answer.

Question. Who were present when this request was made?

Answer. Mr. Henry H. Sibley and his friends.

Question. Did you know any of them?

Answer. There was one from "*Lac qui Parle*" a Mr. Laframbois and Duncan R. Kennedy, and those persons who Mr. Sibley has connected with him.

Question. Who was the interpreter on that occasion?

Answer. Alexander Farribault.

Question. Was Joseph Renville there?

Answer. He was there, but not as interpreter.

Question. Where was that council held?

Answer. At the house of Mr. Huggins.

Question. At the council held at *Traverse des Sioux*, the night before Governor Ramsey left there, as you have stated, when the paper was drawn up to be sent to the great father, who were present?

Answer. Mr. Huggins, Captain Dodd, Mr. Pettijohn, Major McLean, Mr. Sweetzer, Joseph Campbell, and other white men—that is all I recollect.

Question. Where was this council, of which you now speak, held?

Answer. At Mr. Sweetzer's trading-house. We could not write ourselves, and had to get some one to write for us.

Question. Who was the interpreter?

Answer. Joseph Campbell.

Question. Was that paper already written, before you went to council?

Answer. We made the paper, and then presented it to Governor Ramsey.

Question. Was this paper signed by any person?

Answer. We, the Indians, signed it. We wanted to see our money again, and we signed it.

Cross examined by Governor Ramsey and counsel.

Question by Governor Ramsey. Did you at any time request me to pay any of your debts?

Answer. We wished to have all the money given into our own hands, was all we said to you at any time.

Question by same. Did the Indians ever tell me, at any time, that they wanted the money given to any person?

Answer. If you had said yes to our proposition, we wished to pay some of our traders, who were among us.

Question by the same. Did you ever tell me, in council, to whom I should pay the money, and how much?

Answer. If the money had been placed before us, we would then have procured a list of our just debts, and were willing to pay them.

Question by same. Did you ever tell me, in *open council*, how much you wanted me to pay to one, and how much to another?

Answer. I did not name any one; but I wished the money placed before us, and then for the traders to have brought their books and papers also before us, so that we could have obtained a list of our debts.

Question by same. Did you ever bring me a paper, or say, in open council, that I should pay to Mr. Sibley \$20,000, or to that effect?

Answer. I never did; but probably the "half-breeds" might have made up a paper of that description.

Question by same. Was you not present in a council when such a request was made?

Answer. I never heard any thing of the kind. All I ever said about it was, to have the money in our own hands.

Question by same. Were you never present when a paper was presented, requesting me to pay to Mr. Sweetzer \$10,000?

Answer. I never heard anything of the kind.

Question by same. Did you know that Joseph Renville was to have \$8,000?

Answer. We told you to pay Joseph Renville openly there, (at Traverse des Sioux,) but you brought the money down here. E-yang-mo-nee, or Running Walker, presented something to you.

Question by same. Was you ever present when a paper was presented to me, asking for twenty thousand dollars (\$20,000) for Mr. Sweetzer?

Answer. There was nothing said, to give any trader anything.

Question by same. Was you in the council when Hancock presented a paper?

Answer. I was.

Question by same. Had you signed that paper?

Answer. We signed a paper. It contained what we wanted done for our half-breeds, but nothing about the traders. There was a paper

to give such and such amounts, but they were to be paid to those openly. We intended to have paid these amounts, if you had given us the money.

Here Red Iron corrected his statement, and said that, upon reflection, the paper did contain something for the traders. Governor Ramsey's counsel propounded many other interrogatories to Red Iron, as to whether he had made any provision to pay certain persons, &c., naming them; to all which he replied, that he had done so last winter.

Question by Governor Ramsey's counsel. Was it on the paper which you handed to Governor Ramsey at Traverse des Sioux?

Answer. It was. But now, I do not wish to give him any. I did not intend it to pay the traders; but the intention was to give this ~~man~~ some, as one of the half-breeds. I did not make out any paper for Governor Ramsey to pay any one; but this paper had a list upon it, and if the Indians had have gotten the money, they intended to have distributed it, as was stated in that paper. This paper was not signed by the Indians.

Question by same. Was any money to have been paid to Mr. Sweetser, according to the provisions of that paper?

Answer. If the money had been paid over to us, we intended to have given Mr. Sweetser some of it.

Question by the same. How much did you agree to pay to Mr. Sweetser?

Answer. I do not remember exactly.

Question by same. How long has Mr. Sweetser traded with you at Traverse des Sioux?

Answer. Two winters.

Question by same. Was Mr. Sweetser there before the treaty of 1851?

Answer. He was not there before the treaty.

Question by same. Who saved the lives of yourself and family before Mr. Sweetser came there?

Answer. Mr. Sibley or his young men; but they charged us a big price. The goods started from Mendota, where Mr. Sibley lived, and as they came up to us they kept getting higher and higher, until they got up to one hundred muskrat-skins for a blanket.

Question by same. Did you ever sell any furs to Mr. Sweetser?

Answer. The few furs we have killed these two winters we have given to him.

Question by same. Were the names of any other traders down upon that paper?

Answer. Mr. Sibley's name was down, but we wanted to pay it openly, when we got the money into our own hands.

Question by same. Were there any other names on that paper?

Answer. There was one at *Lac qui Parle*, Martin McLeod; and there was Mr. Laframbois, and Mr. Provincelle, but he was dead, and J. B. Farribault.

Question by same. Why was not Mr. La Blond's name down also?

Answer. Because he was dead, and I did not like to pay.

Question by same. Were there any other traders' names down?

Answer. Not that I recollect.

Question by same. Was the name of S. R. Riggs down upon that paper for eight hundred dollars, (\$800?)

Answer. No one told me so.

Question by same. Did that paper provide for the American Board of Missions?

Answer. I don't know anything of it. No one told me so.

Red Iron here again corrected himself, and now says that Mr. Riggs' name was down to be paid, if paid openly. He then remarked that when they are inquiring about so many things at the same time, a man will forget himself sometimes.

Question by same. How much was to have been paid to Mr. Sibley?

Answer. Hanock, the man who wrote it, ought to know best; I do not recollect.

Question by same. How much was Mr. Riggs down for?

Answer. I do not recollect.

Question by same. Was the name of Joseph R. Brown down also?

Answer. It was, and had the whole of the money been paid, a great many would have been set aside. Mr. Franier's name was also down.

Question by same. Did you sign any other papers than those to Major McLean, the treaty, and the protest, just before Governor Ramsey left Traverse des Sioux?

Answer. I don't remember to have signed any others.

Question by same. Did you sign a paper asking to have the money paid to Mr. Sweetser?

Answer. We signed a paper to have him get the money, and to bring it to us openly.

Question by same. Was that paper signed in "open council?"

Answer. Yes. The Indians who came from Mendota were present.

Question by same. Did you appoint him your commissioner to investigate the claims of the traders?

Answer. Yes.

Question by same. Did you constitute him your agent to attend to your affairs?

Answer. We wanted him to assist us, and to take sides with us; the "half-breeds" were brought up, and the traders cheat us, as you say, and we wanted him to help us.

Question by same. Did you sign a paper to that effect?

Answer. Yes. We Indians signed such a paper, and told him to go with it, and he went with it.

Question by same. Who was the interpreter?

Answer. Jo. Campbell.

Question by same. Who else was present at that council?

Answer. We came down from Traverse des Sioux and went to agent McLean's. Agent McLean was requested to sign it, but did not. He wanted time to think about it. Two white men who were assisting Mr. Sweetser and Mr. Pettijohn were present.

Question by same. Did Mr. Sweetser come down with you from Traverse des Sioux?

Answer. He came a part of the way with us.

Question by same. Did you sign the amendments to the treaty?

Answer. I did not.

Question by same. Did any person ask you to come down from Traverse des Sioux?

Answer. Mr. Sweetser asked us to come down.

Question by same. Did Mr. Sweetser ask you to sign that paper?

Answer. Yes.

Question by same. Did you sign the amendments to the treaty?

Answer. No.

Question by same. Did you try to get other Indians to refuse to sign them?

Answer. I did. I came to see the Med-a-wa-kan-toan and Wah-pa-koo-ta chiefs and head men, and none of them had signed. I said to them that our great father had gotten our lands, and now wanted what was set apart for them, and that I would not agree to it. I then said to them that I had seen none of the money which we were to have received under the treaty, and that I was not a child to sign again, and that to-morrow we would go home.

Question by the government commissioner. Read this list to the witness, marked B, Senate document No. 29, and ask him which of those, whose names are signed thereto, were chiefs and headmen, as recognized by the several bands of Indians before the meeting with Governor Ramsey to sign the amendments to the treaty?

To this question there is no answer?

ALEXANDER G. HUGGINS, sworn and examined as a witness.

Question. Where do you reside, and what is your age and occupation?

Answer. I live two and a half miles from Traverse des Sioux. I am fifty-one years old, and have been a farmer and teacher among the Indians since eighteen hundred and thirty-five, (1835.) and up to eighteen hundred and fifty-two, (1852.)

Question. Were you present at Traverse des Sioux at the making of the treaty in July eighteen hundred and fifty-one, (1851)?

Answer. I was.

Question. Did you see the Indians sign the treaty?

Answer. I saw some few of them sign it. Most of them had signed it before I got there.

Question. How many papers did they sign at the treaty?

Answer. They signed two papers. They had a shade made of brush; at the north end of which they had a table on which they signed the treaty.

Question. Who sat at that table?

Answer. I do not remember who was at that table.

Question. Where was the other paper signed?

Answer. Some eight or ten feet from the table.

Question. Who presided at that place?

Answer. Doctor Foster was there, and back and forth.

Question. Who conducted the Indians to the other table?

Answer. He would see that no one went away until he signed the

second paper. I don't know who held the pen with which the Indians made their marks.

Question. Did Joseph R. Brown hold the pen?

Answer. My impression is that he held the first pen, and I do not know whether he held the second pen or not.

Question. Did you hear this second paper read and explained to the Indians?

Answer. I did not.

Question. Did you hear it stated at that time what it contained?

Answer. I did not.

Question. Did you hear that clause of the treaty in regard to paying their debts explained to the Indians?

Answer. I think I did not. I did not have any interest any way in it.

Question. Were you present at the payment *last fall* at Traverse des Sioux?

Answer. I was.

Question. At whose house were the councils held?

Answer. At my house.

Question. Now state what then and there took place between Governor Ramsey and the Indians?

Answer. There is no answer to this question.

Question. Did you sign this document on pages 3 and 4, Senate Document No. 29, part 1, as a witness?

Answer. I have no recollection of signing but one paper as a witness, and do not recollect the precise contents of it. My memory is bad.

Question. Was that paper explained to the chiefs?

Answer. That paper was read and explained to them sentence by sentence as well as it could be done.

Question. When did you witness that paper?

Answer. The night before Governor Ramsey left Traverse des Sioux.

Question. Look over that paper and see how many of those who have signed it are chiefs?

Answer. I have examined it and find the names of *four* chiefs on it.

Question. Are the others on the list headmen and soldiers?

Answer. They are. The next four are headmen.

Question. Look at the receipt on page 7, Senate Document No. 29, part 2, and say how many of these men are chiefs who have signed the receipt?

Answer. E-ta-wa-ke-an, Thunderface, or Limping Devil, is the only chief who was recognized as such at the making of the treaty. At the time of the payment was the first time that I ever heard of any more of them being chiefs; and they are only two, to wit: O-tak-e-ta and No-hope-ton.

Question. Do you know Joseph Provincelle?

Answer. I know the old man and his son, but not their first or Christian names.

Question. How long was he trading at that point?

Answer. About thirty-eight years—twenty years before I came to the country, as I learn.

ALEXANDER G. HUGGINS cross-examined by Gov. Ramsey and counsel.

Question. Do you know all the chiefs of the See-see-toan and Wah-pa-toan bands of Sioux Indians?

Answer. I do not know. I have been in the habit of hearing the chiefs named over, but I cannot say to what bands they belong. Wahnata was a chief, the greatest in the nation, but he has been dead a great many years. No-hope-ton, or No-rop-ton, was not a chief to my knowledge until after the payment. He was not at the treaty. O-tah-e-ta was not to my knowledge at the treaty. I did not know him. I knew him as a chief after the payment. He had a *band* with him last winter, but I do not know him yet. I was not in at the first part of the signing of the treaty. I came in about the close. I was not to my knowledge at any other of these councils previous to the signing of the treaty.



CORNELIUS A. SHAFFER, sworn and examined as a witness.

Question. Were you at Traverse des Sioux at the time Governor Ramsey assembled the Indians, in November last, to make the payment of money due under the treaty?

Answer. Yes.

Question. What were you engaged in, and how long had you been so employed?

Answer. I was book-keeping for Mr. Sweetser for six months.

Question. Were you present at the councils held with the Indians by Governor Ramsey?

Answer. I was at some of them.

Question. Did you hear the chiefs, in open council, direct Governor Ramsey how they wanted the money, due to them under the treaty, paid?

Answer. I was present in council when they directed him to pay it to themselves; the governor's reply I do not recollect. He did not pay the money at that council. I was not present at any other council when they demanded it from him.

Question. Look at Senate Document No. 29, part 1st, and see whether you were present when that protest by the Indians was signed by them.

Answer. I was, and signed it as a witness.

Question. Was that paper signed in "open council"?

Answer. It was signed in "open council," the night before Governor Ramsey left Traverse des Sioux. It was signed at Mr. Sweetser's store. There were several persons present—myself, Major McLean, Milo Persons, Mr. Franquir, A. J. Campbell, David Olinstead, J. B. Huggins, A. G. Huggins, and Mr. Holtsclaw. I have a distinct recollection of all these persons being there. It was interpreted to the Indians by A. G. Campbell and Duncan Campbell.

Question. Did that protest come to the knowledge of Governor Ramsey?

Answer. It was the same paper which the Indians took to Governor Ramsey the morning before he left Traverse des Sioux. I saw them take it to him, and went along with them myself. I am not certain whether Governor Ramsey was in the sleigh ready to go, or whether he was just coming out of the door. The Indians, I think, asked him to hold a council. I did not perfectly understand the language in which they made the request. The governor either told them in reply that he had not time, or gave them a decided refusal, and he then left shortly after for St. Paul.

Question. How many councils were held there of which you know?

Answer. I cannot say. I was at four; at three of them I was out at the door, and at one, inside. The door was open at all four of the councils.

Question. See that receipt to Governor Ramsey on page 7, Senate document No. 29, part 2, and state whether any such paper as that was signed at any council where you were present.

Answer. No—none, to my knowledge.

Question. Do you know the chiefs of the See-see-toan and Wah-pa-toan bands of Sioux Indians?

Answer. I know the *seven* chiefs, who were recognized as such, before, and at the treaty of Traverse des Sioux, and before the payment.

Question. How many of their names appear to that receipt to Governor Ramsey?

Answer. I see but *two*. Their names are, E-tay-wah-ke-an and Wah-na-ta. There are several names here who were spoken of as chiefs after the payment.

Question. Give the names of these new chiefs of whom you speak?

Answer. No-hope-ton, and O-tak-e-ta.

Question. Were you present when Red Iron was brought before Governor Ramsey?

Answer. I was. But there was great confusion, and I could not hear all that was said. Not the half, I presume. I was at the door, about half in and half out.

Question. You said that these chiefs were not known as such before the payment. Do you know how, or by whom they were made chiefs?

Answer. I do not know, except from what the Indians told me.

Question. Do you know of any chiefs having been broken of their chieftainship?

Answer. I do not.

Question. How long have you been in the Indian country?

Answer. About nine months.

Question. Do you speak the Da-ko-ta or Sioux language?

Answer. A little; but knew nothing of the language until I went to the Indian country.

Question. Did you know the chiefs of the See-see-toan and Wah-pa-toan bands of Sioux?

Answer. I knew *five* at the time of the council, and became acquainted with *two* afterwards.

Question. Were you present when the Indians demanded the money of Governor Ramsey; and if so, who made the demand?

Answer. It was one of the chiefs. But I do not now recollect which of them.

Question. Repeat what the chief said in making that demand of the money?

Answer. The chief asked Governor Ramsey to pay them the money, as stipulated by the treaty.

Question. Are you certain that was what the chief said?

Answer. Yes.

Question. How many chiefs were present at that time?

Answer. I cannot say.

Question. Repeat the names of the *seven* chiefs of these bands?

Answer. Mah-zah-shah or Red Iron, E-yang-mo-nee or Running Walker, Ish-tah-hum-bah or Sleepy Eyes, E-tay-wa-ke-an or Limping Devil, O-pee-en-dah or Big Curly Head. I do not know the other names. O-tak-ke-ta belongs to the "Little Rapids" band; and some recognize him as a chief.

Question. How many of those you have named were present at this council?

Answer. I cannot tell.

Question. Who drew up this protest of which you have spoken?

Answer. Mr. Sweetser.

Question. Who invited them to Mr. Sweetser's house?

Answer. I do not know.

Question. Did you see the protest presented to Governor Ramsey?

Answer. I did not.

Question. Did the Indians employ an interpreter when they went to present it to Governor Ramsey?

Answer. They did.

Question. Who was the interpreter on that occasion?

Answer. A. J. Campbell.

Question. Was there a duplicate of that protest?

Answer. I cannot say.

Question. In what language did they speak to Governor Ramsey?

Answer. In their own language; and I heard the interpreter explain it to Governor Ramsey. I don't know who addressed the governor, whether it was Mr. Sweetser or A. J. Campbell.

Question. What was A. J. Campbell's employment?

Answer. He was an interpreter, and employed by Mr. Sweetser?

Question. Was Governor Ramsey about to leave Traverse des Sioux when the protest was presented to him?

Answer. I do not know. I said before that I did not recollect whether he was in the sleigh or was just coming out of the door. It was quite early.

Question. Were you in the Indian country before the treaty of Traverse des Sioux?

Answer. No. I came there about a year after. I mean by recognized chiefs such as the Indians themselves recognized as such.

Question. Was that the most suitable place at which to hold a council?

Answer. It was the most convenient house.

Question. Did Red Iron make Mr. Sweetser's house his headquarters while there?

Answer. No. He made his own lodge or tent his headquarters.

Question. Who came to Traverse des Sioux with Governor Ramsey?

Answer. Major McLean, Hugh Tyler, and Mr. Fillmore came there, but I cannot say whether they came with Governor Ramsey or not.

—

JAMES WELLS, sworn and examined as a witness.

Question. Were you present at the treaty at Mendota, August 5, 1851?

Answer. Yes.

Question. Were you present at the payment?

Answer. I was not.

Question. Were you a creditor of the Med-a-wa-kan-toan Indians?

Answer. I was.

Question. Have you your books here at this time?

Answer. I have not.

Question. How much did you get of the money paid to the creditors of the Med-a-wa-kan-toan bands?

Answer. A little upwards of seven thousand dollars.

Question. Who paid you that money?

Answer. I was not there, and cannot say who; but it was paid.

Question. Who passed it to your credit?

Answer. Henry H. Sibley.

Question. Was that sum due to you individually, or was it as agent for others?

Answer. It was due to me individually.

Question. How many years was it accumulating?

Answer. Seventeen years.

Question. Why did you not get fifteen thousand dollars, (\$15,000,) as set forth in that list?

Answer. The scarcity of funds, I suppose.

Question. Was any deduction made for agents?

Answer. I understood there was.

Question. How much?

Answer. Fifteen per cent.

Question. Who did that per centage go to?

Answer. I do not know.

Question. To whom was this power of attorney signed by you given?

Answer. I do not know.

Question. Did you sign it?

Answer. I did.

Question. Did you get any money from the Wah-pa-koo-ta-band?

Answer. Yes.

Question. Who paid that money to you?

Answer. I cannot say. It was paid and passed to my credit.

Question. Who did you settle with for it?

Answer. Mr. Henry H. Sibley.

Question. Was that money due in your own right, or as partner with some other person?

Answer. In my own right.

Question. Where were you at the time of this payment?

Answer. At my residence at Lake Pepin.

Question. Did you owe this money to H. H. Sibley?

Answer. I did.

Cross-examined by Governor Ramsey and counsel.

Question. Did you authorize this money to be paid to Mr. Sibley?

Answer. I authorized it to be paid to H. H. Sibley, and also his signature for me.

Question. Was this account of fifteen thousand dollars due to you?

Answer. It was; but seven thousand dollars have been paid. I have been with the Indians twenty-eight years, and speak the Sioux language.

Question. Did you attend the treaty, and if so, please say what was said by the Indians in regard to the payment of their debts?

Answer. They asked Governor Ramsey in "open council" to do so. They objected, in two instances, to signing the treaty, unless there was some provision made for the payment of their debts. There was an appropriation made in the treaty for paying their debts, and out of this appropriation each trader, whose claim was considered just by the Indians, was to be paid.

Question. Had this money been paid to the Indians, would they, in your judgment, have paid their debts?

Answer. The disposition they first expressed was to pay their debts. I think if they had received the money they would have bought whiskey and horses, and their debts would have been badly provided for. They would not have kept on hand fifty or sixty thousand dollars with which to have paid their debts, nor, in my judgment, that many cents; nor would they have kept anything for their removal and subsistence.

Question by the government commissioner. Which of these statements do you believe?

Answer. I believe both. There were new influences brought to bear upon them and they were made damned rascals.

Question. Why did you not swear to your account?

Answer. I was not there at the time. When I left, I asked in the presence of Governor Ramsey if there was any testimony required on my part. Whether Governor Ramsey replied or not I cannot say. But some one said it was not necessary; that my man's testimony was sufficient.

Question. Did you sell that amount to these Indians yourself?

Answer. I did.

Question. Was this clerk you mention there with you for seventeen years?

Answer. Not all the time.

Question. How long was he with you?

Answer. Fourteen years and some months, but he was gone some

times for two or three years at a time from me during the time ; he was trading five or six years during this time for himself.

Question. Did you ever present a bill of items to any person for this claim against the Indians ?

Answer. I did not.

Question. Did the Indians in open council request that you should be paid the sum of fifteen thousand dollars (\$15,000?)

Answer. Yes.

Question. Where and when?

Answer. At Mendota, in the council room, in August.

Question. Before whom did they make that request?

Answer. Before the government commissioners.

Question. Who were the commissioners of whom you speak?

Answer. Colonel Lea and Governor Ramsey. The appropriation to pay off their debts was made in open council. Then, the night following, the Indians came together and investigated the claims of the traders, and cast off such of the debts as they thought unjust, and mentioned the sums to be paid out of this appropriation in satisfaction of such debts as they considered just. And then and there it was that they wished me to receive fifteen thousand dollars of my debts against them.

Question. Did they sign a paper to that effect?

Answer. I do not recollect whether they did or not.

Question. How were the commissioners to be told of this understanding?

Answer. This paper was to be taken to the commissioners in the morning.

Question. Was there a paper signed by the Indians?

Answer. The treaty being signed, I came away.

Question. Was there a paper signed?

Answer. I think not.

Question. Who were present when the Indians acknowledged an indebtedness to you of fifteen thousand dollars, (\$15,000?)

Answer. I think a good many were present. Mr. Sibley, Alexander Farribault, Alexis Bailey, senior and junior, Mr. Moore, and many others. I do not know that I can name them now.

Question. Did they all have claims against the Indians, as well as yourself?

Answer. Many of them had.

Question. Did Wabashaw acknowledge to owe this sum to you?

Answer. No. I never traded with him.

Question. Did Wah-koo-ta?

Answer. Yes.

Question. In whose presence did he make that acknowledgment?

Answer. In the presence of those persons named above.

Question. Can you exhibit to me the items of that bill of fifteen thousand dollars?

Answer. Yes.

Question. Will you do so shortly?

Answer. I will when you wish it.

Question. When did your trading commence with these Indians?

Answer. In 1837, with the "Red Wing" band.

Question. Which band owed you this sum?

Answer. The Red Wing band.

Question. Who are the chiefs of that band?

Answer. Wah-coo-ta and Iron Cloud.

Question. Why did you not file a bill of particulars of your account?

Answer. I had my books there on the ground.

Question. Did you exhibit the books to the commissioners?

Answer. They were not called for.

Question. How many Indians are there in the Red Wing band?

Answer. From three to four hundred.

Question. How many are women and children?

Answer. I think two-thirds are women and children?

Question. Did they sell you their furs and skins from year to year?

Answer. They did.

Question. About what amount?

Answer. One thousand dollars' worth and upwards, annually, in money and furs together.

Question. Who made the entries in those account books of yours?

Answer. Joseph Boison. Most of them, however, were made by myself. He writes his name; he brought in the accounts, but he did not make the entries in the books.

Question. Why did he make his mark to his affidavit when he swore to the correctness of your account?

Answer. I was not there at the time, and I was told that my book accounts being there, I would not be required to swear to them.

Question. When the Indians made this appropriation you speak of, who made out the list of the names of the claimants?

Answer. Mr. Sibley.

Question. Were all the traders present with their books of accounts?

Answer. I think so, except Mr. McKenzie. Joseph Boison is a Frenchman.

Question. Have you had a conversation with Governor Ramsey in reference to the demand made for this money by the Indians?

Answer. I have not.

—

Dr. THOMAS S. WILLIAMSON, sworn and examined as a witness. Says he resides at Yellow Medicine, on the Minnesota river, in the Sioux country.

Question. How long have you resided in the Indian country?

Answer. About eighteen years. I am a missionary to the Indians from the Presbyterian church, and was a practising physician before I came out to the Indian country. I have made it my business to learn their language, and I can speak it pretty well, and have no difficulty in talking with them, although I do not understand it as well as some others.

Question. Were you present, in 1851, at Traverse des Sioux, when the treaty of the 23d July, 1851, was made with the Sioux Indians?

Answer. I signed it as a witness and was there.

Question. Did you witness any other paper than the treaty?

Answer. I did.

Question. Look at Senate Document No. 29, part 2, page 22, marked (A,) and say whether you signed that instrument as a witness?

Answer. I signed this paper; but the schedule of the traders' names was not to it when I signed it, at the end of the signatures. The Indians had all signed it before I signed it. The names of the traders, and amounts of indebtedness, have all been added to it since. This paper was signed at the same time the treaty was signed, and Governor Ramsey and Luke Lea were present when both the treaty and this paper were signed. I thought it was another copy of the treaty when I first saw the Indians sign it. As I walked down, I was told that it was a different paper from what I supposed it to be. Some Indians who signed the treaty told me that they did not know what it was they had been signing. I then went back and examined it. When I went back and went into the tent where it was, I asked for it, and it was handed to me; I read it, and asked for the schedule. They told me it was not completed. Most of the traders were present—Mr. Sibley, Mr. Dousman, Mr. Brown, and others. Governor Ramsey was not present when they handed it to me. My impression is that none but traders were in there, who were interested in it. I handed it back and left the tent. I saw Mr. Dousman have a paper in his hand, and he had names and figures on it, which I suppose was the list or schedule of the traders' names, and the amounts claimed by them.

Question. Did you hear the treaty read and explained to the Indians at the time they signed it?

Answer. I heard it read to them only in their own language.

Question. Was this paper, which is witnessed by you, explained to the Indians?

Answer. It was not in my presence, nor when they signed it. I asked if the Indians understood it. I think Mr. Sibley said that it had been fully explained to them, or some one said so.

Question. How long after you had signed this Traders' Paper was it before you went back to see its contents, as you have mentioned?

Answer. It was perhaps about two hours, and then it was that Mr. Sibley, or some one else, said it had been fully explained to the Indians.

Question. Who had the possession of this paper you witnessed?

Answer. Joseph R. Brown had it on the head of a barrel or on a board on the barrel. It was in the presence of Governor Ramsey and all. It was about ten or twelve feet from the place where the treaty was being signed.

Question. Explain the manner in which these papers were signed.

Answer. The chiefs came forward in the order of the chiefs; they signed two copies of the treaty; and then some person took them to the *Traders' Paper* for their signature.

The whole of the whites about there understood, and I think the Indians did also, that they were to provide in the treaty for paying their debts. Indeed it was understood that no treaty could be made without the assistance of the traders. The traders frequently urged the Indians to make the treaty, as they were in debt, and there was no

way to pay it unless they made the treaty. The Indians were opposed to making such a treaty. They were willing to make a treaty, but not that treaty. They were willing to sell a part of their lands, but not all the government wanted. They were willing to sell a strip of land along the Mississippi river, but did not want to sell so large a tract of country as the government wanted.

We had a claim of eight hundred dollars, (\$800,) or more, against them for cattle killed before the treaty. The Indians I mentioned it to said they wanted me paid. We never presented the claim to the Indians in open council, or otherwise. It was only presented to the commissioners, and I was paid afterwards by Mr. Sibley, mostly in drafts given by me on him, and all I received in money was in gold and silver currency.

I believe a single trader could have prevented the treaty. Without the influence of the whole of the traders, I do not believe the treaty could have been made.

At one time Commissioner Lea talked strongly of going away. I was present during all the signing of the treaty, and of this Traders' Paper, and this last, or Traders' Paper, was not explained to them at any time.

Question. Look at the Indians' receipt to Governor Ramsey on page seven, Senate document No. 29, and say which are chiefs and which are not.

Answer. Thunder Face, or Limping Devil, is a chief; Wah-nok-soon-ta is a young chief. His father, of that name, is dead, but I have understood that he was now recognized as a chief. Wah-na-ta is a chief. These are the names of four of the chiefs here; the others I do not know. Some of the others, I think, are now on the pay-list as chiefs. Three of the chiefs who signed the treaty, are all, I find, on Governor Ramsey's receipt. Some of them were not there when the treaty was signed, who I now know as chiefs, and who are now recognized as such. It was Sleepy Eyes who said that he wanted his son to be recognized as a chief.

Question. Are those who signed Governor Ramsey's receipt a majority of the chiefs of the See-see-toan and Wah-pa-toan bands of Sioux Indians?

Answer. There are eleven chiefs paid at the "Redwood" agency this month by agent Murphy, or on his list for payment, and there are twelve names on Governor Ramsey's receipt; but only seven certain, or perhaps eight, are the same as those on agent Murphy's pay-list as chiefs. One is only a first soldier.

Question. How many of these seven or eight were recognized as chiefs by their bands, prior to the payment last fall?

Answer. *Four*, certain; but there are names I do not know on that list.

Dr. THOMAS S. WILLIAMSON cross examined by Governor Ramsey and counsel.

Question. Do you remember distinctly who was at the table where the *Traders' Paper* was signed?

Answer. Joseph R. Brown.

Question. Was Commissioner Lea or Governor Ramsey at that table?

Answer. No.

Question. Was there much noise and confusion at that table?

Answer. No noise, except the passing and repassing of the Indians when they signed the paper.

Question. What was Governor Ramsey doing at this time?

Answer. He was sitting looking at them sign the treaty.

Question. Did it not take all the attention of Commissioner Lea and Governor Ramsey to see to the signing of the treaty, and to attend to the Indians in that quarter?

Answer. Their attention was doubtless given to the signing of the treaty.

Question. Were there not medals given to the Indians as they signed the treaty?

Answer. I do not remember certainly. They were given some time while they were there, and before they left the council.

Question. Did you see Governor Ramsey at the table where this Traders' Paper was signed at all?

Answer. He was not at it until after the signing was finished.

Question. Did you see him at the table where this Traders' Paper was signed, after the signing was concluded?

Answer. I have no remembrance of it.

Question. Did you see him at that table, where the Traders' Paper was signed, at any time?

Answer. I have no remembrance of having seen him there.

Question. Are you certain they signed three papers?

Answer. Yes.

Question. Were two of those papers duplicate copies of the treaty?

Answer. I did not read them, but supposed they were. One copy I heard read. The third paper was the one signed where Joseph R. Brown was.

Question. Did you remain there until all these papers were signed, and the council adjourned?

Answer. Yes.

Question. Are you certain that there are eleven chiefs of the See-see-toan and Wah-pa-toan bands?

Answer. My knowledge that there are eleven chiefs was derived from the agent's roll on my way down to this place.

Question. Do the chiefs have unlimited power over their bands?

Answer. They have very little power. They are mostly influenced by their young men.

Question. Is not the power of the chiefs so very limited, that a half a dozen of the young men can, at any time, interrupt any business carried on with them?

Answer. Yes; they can.

Question. From your knowledge of Indian character, do you believe that if this two hundred and seventy-five thousand dollars (\$275,000) had been paid to them, they would have paid their debts with any part of it?

Answer. I am fully persuaded that they would not; that is, they would not have paid all. They might have paid a part, and I suppose would; but not all.

Question. Look at Senate Document, No. 29, page 3, part 2, and say who are chiefs, of the names signed to that paper?

Answer. The first three are chiefs; the others, or most of them, are not chiefs. I know most of the others, and they are not chiefs. There are some I do not know.

Question. See Senate Document, No. 29, part 2, pages 15, 16, and 17, and say how many are chiefs whose names are signed to that paper?

Answer. There are three chiefs on that paper. The others I do not know. There are some, nevertheless, who are men of considerable influence. The chiefs are Mah-zah-shah, E-yang-mo-nee, and Wah-nok-soon-ta. I probably know the most of them, if their names were correctly spelled.

Question by government commissioner. From your knowledge of the character of white men, do you believe they would have paid all their debts under similar circumstances, which were from fifteen to thirty years' standing?

Answer. I answer, that some white men would pay, and some would not.

Question. Do you mean, that if the money had been paid to the chiefs according to the treaty, that they then would not have paid their debts?

Answer. I mean, that if it had been paid to them in "open council," that they would have paid but a small part of their debts with it. I want that word "*open council*" to go down.

—

WILLIAM QUINN, sworn and examined as a witness.

Question. Are you a half-breed?

Answer. I am.

Question. To what band are you related?

Answer. I am not a Sioux half-breed, nor related to any band of Sioux Indians.

Question. Did you receive money, under the treaty at Mendota, as a Sioux half-breed?

Answer. I received money in right of my wife as such.

Question. Who paid you that money?

Answer. Hugh Tyler.

Question. How much did you receive?

Answer. Four hundred and twenty-five dollars.

Question. In what kind of funds did you receive it?

Answer. In paper money.

Question. On what bank?

Answer. I think on some of the banks of New York.

Question. By whom were you paid, and what per centage was deducted from the amount paid to you?

Answer. I was paid by Hugh Tyler, and he deducted *fifteen* per cent.

Question. Did you appoint Hugh Tyler your attorney, to draw this money from Governor Ramsey?

Answer. I did not.

Question. What "band" was your wife related to?

Answer. To Little Crow's band, and the Lac qui Parle band also.

Question by Governor Ramsey's counsel. Did you, or Mr. Steele, receive this money?

Answer. I received it myself, and then turned it over to Mr. Steele at the same time.

Question. Can you read and write?

Answer. Yes.

Question. See this paper, which is dated December 11, 1852, now shown to you, and say if that is your signature?

Answer. It is my signature. When I signed this paper, I thought I was signing a receipt for the money I was receiving from Hugh Tyler. It was not explained to me before I signed it. I did not read it at the time.

Question. Did you suppose that you were signing a duplicate receipt?

Answer. I did. I believed I was to receive five hundred dollars. I can read.

Question. Do you usually sign papers before you read them?

Answer. Sometimes I do, and sometimes I do not.

Question. Where were you, when you signed that paper?

Answer. In Henry H. Sibley's back office.

Question. Who were present at that signing?

Answer. H. L. Dousman, H. H. Sibley, Hugh Tyler, and Franklin Steele.

Question. Do you remember whether that paper was read to you or not?

Answer. I do not.

Question. Did you not know the contents of that paper, when you signed it?

Answer. I did not.

Question. Did you ever hear that it was explained before it was signed?

Answer. I did not. When we were going to Mendota with Hugh Tyler, he said that some of the half-breeds had appointed him their attorney, to receive their money; and I answered him that it was the first I had heard of it.

Question. Was this before the payment?

Answer. It was before I received my money.

Question. Do you remember the reply you made to Hugh Tyler?

Answer. No; I do not.

Question. Why did you go to Hugh Tyler to get your money?

Answer. I was told that he was paying the money.

Question. Did you not say to Franklin Steele, at Mendota, after you had signed the power of attorney to Hugh Tyler, that you had authorized Tyler to receive your money from Governor Ramsey?

Answer. I recollect telling Franklin Steele that I wanted to deposite

Question. Did you authorize Mr. Steele to receive it?

Answer. I told Mr. Tyler that I wanted to deposite Mr. Steele's hands.

Question. Do you recollect whether Mr. Steele requested to pay the money due to you in gold or silver, or not?

Answer. I do not remember whether Mr. Steele asked for silver or not; but Mr. Tyler asked Mr. Steele which he preferred, money or gold. I replied that I supposed it would not make any difference, as I presumed the paper money was good.

HENRY JACKSON, sworn and examined as a witness.

Question. Where do you reside?

Answer. At Maukato, Minnesota Territory.

Question. What is your age?

Answer. I am going on fifty-two years old.

Question. Were you at Traverse des Sioux in July, 1862, when the treaty between the United States and the Sec-see-toan bands of Sioux Indians was made and signed?

Answer. I was.

Question. Did you sign it as a witness?

Answer. I did.

Question. How many papers did you witness on that day?

Answer. Two papers.

Question. Look at Senate document 29, part 2, page 1, marked A, and see if your name is to that paper as a witness.

Answer. I do see it, but I have no recollection of signing it.

Question. Did you hear the Indians there in open council ask Governor Ramsey for the money due under the treaty of 1851?

Answer. All I heard was the Indians ask, through the interpreter, to have the money paid down before them; but this was at the treaty, and not at the payment. I alluded to the treaty at Mendota.

Question. Do you recollect what Governor Ramsey replied?

Answer. The commissioner's reply was, that this would be settled by their great father.

Question. Who paid out the money to the traders and half-breeds at Mendota last fall?

Answer. Hugh Tyler paid out all that I saw paid.

Question. What kind of funds were paid out by Hugh Tyler?

Answer. It was paid out in paper funds, I believe, on the Manhattan Bank of New York. There was also another bank—the Merchants' or Mercantile, I believe—some of the New York banks.

Question. Were you present during the whole time of the payment?

Answer. No; not during the *whole* payment.

HENRY JACKSON, cross-examined by Governor Ramsey's counsel.

Question. Were there any councils held at which you did not attend?

Answer. I was present at all public councils. But there were private councils also, as I understood. I was present at one of them, but it amounted to nothing.

Question. Who do the Indians generally mean when they say their "great father?"

Answer. The President of the United States.

Question. Had you a claim against these Indians?

Answer. I had.

Question. Was that claim allowed to you?

Answer. A portion of it was allowed.

Question. Had you assigned away that claim before the payment?

Answer. I had; and gave General Leech an order to Henry H. Sibley for the money, and two hundred and fifty dollars were paid; but there was deducted *fifteen* per cent.; the draft was for three hundred dollars, but they deducted forty-five dollars out of it.

Question. Did you receive any money for yourself?

Answer. I did not.

Question. Did you not hear Hugh Tyler tell the persons to whom he was paying the money that they could have their choice, either to take gold or silver or paper?

Answer. I did not.

Question. How did you expect to get your money?

Answer. I expected that if the Indians had got the money paid to them, as the treaty stipulated, I would have got my money, or more than I did get.

Question. How much did you put in your claim for at Mendota?

Answer. Something over three thousand dollars (\$3,000.) I do not recollect the *precise amount*, unless I could go and look at my books.

Question. Were these claims against the Indians?

Answer. Yes; I had no account except against the Indians themselves.

Question. Had the Indians always paid you promptly?

Answer. Some had, and some had not. Pretty much like white men in that respect.

Here the witness explained the reason why he thought he would have done better if the Indians had gotten the money themselves. He said it was because he was not admitted into the councils with the traders; that when he said anything they told him, if he expected to get anything, that he must hand in his account to Mr. Sibley. This was at Traverse des Sioux; and it was the same case at Mendota.

Question. Were you at Traverse des Sioux several days before the treaty was signed?

Answer. I was there prosecuting my claim. I went up with the commissioners, and came down with them.

Question. Did you not fail to secure your claim?

Answer. I was there, but I was not admitted.

Question. Is this your signature to this paper [showing him the paper called the "Traders' Paper"]?

Answer. It is; but when I signed that paper I supposed I was signing a copy of the treaty. I did not read it.

Question. Do you recollect of asking any one to take care of your claim, and have it allowed for you?

Answer. I did so tell Mr. Steele. I said I would leave him my books and accounts. Mr. Steele said I need not leave my books; that I only needed to make out my account and hand it to Mr. Sibley, and he would attend to it.

Question. How did you expect to have your claims allowed?

Answer. I thought if Mr. Sibley could not get it, it would be of no use for me to stay.

Question. Then you did expect to get your money?

Answer. I understood from the half-breeds that there was some arrangements about it.

Question. Was such an arrangement made?

Answer. I do not know, of my own knowledge, but I heard so.

Question. Were you not satisfied that such an arrangement had been made?

Answer. I was, from hearsay.

Question by government commissioner. Examine this paper, [the "Traders' Paper" held up again,] and say if you signed that paper, and did you sign it at the bottom?

Answer. These names and amounts were not there when I signed it. I did not witness any paper in the middle of the writing. This is my handwriting, but I supposed, when I signed it, that it was a copy of the treaty, as I was called to witness the treaty, and never was called to witness anything else.

The following is the evidence of the chiefs of the See-see-toan and Wah-pa-toan bands of Sioux or Da-ko-ta Indians, being the first six chiefs who signed the treaty of "Traverse des Sioux," of the 23d of July, 1851, in the order consecutively as it was signed by each.

The head chief, WAH-MIN-DAY-NE-CHAH, or the Orphan, a chief of one of the See-see-toan bands of upper Sioux Indians, sworn and examined as a witness.

Question. Did you sign the treaty at "Traverse des Sioux," concluded on the 23d of July, 1851?

Answer. Yes.

Question. Did you sign any other paper at the same time in open council?

Answer. Yes. I am not a white man, and do not know how to read and write. I do not know anything about papers. They pulled me by the blanket and made me sign another paper also. All I know about it is, that the traders had a paper there, and that they took me along and made me sign it. When I signed the paper Colonel Lea had, they pulled me by the blanket and made me sign another paper, which was the "Traders' Paper," which Mr. Brown had.

Question. Was that "Traders' Paper," which Mr. Brown had, interpreted to you before you signed it?

Answer. It was not explained to me at all. I was pulled by the blanket, and made to sign it. That is all I know about it.

Question. Were you present in council with Governor Ramsey when he came up to "Traverse des Sioux" *last fall* to make the payment.

Answer. No.

Question. Where was you at that time?

Answer. I was north, above my village.

Question. Did you have an understanding in "open council" before you signed the "Traders' Paper" concerning it?

Answer. I never heard anything about it before.

Cross-examined by Governor Ramsey's counsel.

Question. Do you know how much money the Indians were to receive for the lands ceded to the United States, under the treaty made at Traverse des Sioux, in July, 1851?

Answer. I do not recollect.

Question. Do you know how much was to be paid to the Indians to enable them to subsist themselves for the first year after their removal?

Answer. I do not recollect.

Question. Do you know how much was set apart for farming purposes under the treaty?

Answer. I do not recollect.

Question. Do you know how much was to remain in trust for the Indians?

Answer. I do not recollect.

Question. Do you know who witnessed the treaty?

Answer. I did not see any white man sign it.

Question. How much land did you cede to the United States?

Answer. The traders made a paper to sell our land, and I do not know how much we sold.

Question. How did you come to sign the treaty?

Answer. The commissioners, Colonel Lee and Governor Ramsey, told me that the great father had sent them up there to get a little portion of our land, and I signed it.

Question. Did the traders influence you to sign the treaty?

Answer. The traders never told me to sign it. The commissioners told me to sign it, and I did so.

Question. Was the treaty explained to you all by the commissioners?

Answer. When we signed it, it was not.

Question. Was it explained to you before signing it?

Answer. It was not.

Question. Did they tell you about it before you signed it?

Answer. I do not recollect that it was explained before we signed it?

—

E-YANG-MO-NEE, Running Walker, or Big Gun, a chief of one of the Wah-pa-toan bands of Upper Sioux Indians, sworn and examined as a witness.

Question. Did you sign the treaty at Traverse des Sioux in July, 1851?

Answer. Yes.

Question. Did you sign any other paper at that time?

Answer. I did.

Question. What was it?

Answer. I do not know, but I thought it was the custom when we sold our lands to sign two papers.

Question. Did you sign the paper for the traders to get their pay out of the treaty money?

Answer. I do not know any more about it. I do not know anything about paying the traders, or about signing a paper to pay them.

Question. Were you at the "*fall*" payment?

Answer. Yes.

Question. Did you and the other chiefs hold councils with Governor Ramsey at that time?

Answer. We did.

Question. Did the chiefs in open council tell Governor Ramsey how they wanted their money paid?

Answer. Yes. They did.

Question. How did they ask to have it paid, and to whom?

Answer. The first time Governor Ramsey came into council he said he had all our money. We called for our money in a lump. He would not pay it. We demanded it of him, and he would not pay it to us.

Question. How many times did the chiefs ask for it?

Answer. I do not recollect rightly, but it was three or four times.

Question. What did Governor Ramsey tell you further about it?

Answer. I do not recollect what he said.

Question. Who was the interpreter when the chiefs demanded the money of Governor Ramsey?

Answer. A. J. Campbell was the interpreter.

Question. Was Mr. Campbell the interpreter at each conversation or council, when you demanded the money?

Answer. Yes.

Question. When you called for your money in a lump, what money did you mean?

Answer. The money we demanded was the two hundred and seventy-five thousand dollars. We demanded it, and the yearly payment, or "annuity money," also?

Question. How much was the "annuity money?"

Answer. Forty thousand dollars in cash, five thousand dollars in goods, and five thousand dollars in provisions, for fifty years.

Question. Has any one talked to you about this matter to-day?

Answer. No one has said anything to me about it.

Question. How much was there to be paid for agriculture, &c.?

Answer. There was thirty thousand dollars set apart for such purposes.

Question. How much was set apart for the erection of mills, &c.?

Answer. There was, for different purposes under this head, about thirty thousand dollars; I do not recollect any more.

Question. Do you recollect how much was given, or to be given, for your lands, in full consideration of the whole?

Answer. I do not recollect.

Question. How long were you to remain and live on this land before you were to leave it?

Answer. I do not recollect.

Question. How much money was to be set apart on which you were to receive interest, or annuity money?

Answer. I do not recollect.

Question. Did you sign but two papers?

Answer. At the time of the signing of the treaty I signed it; and then they took me to another paper and I signed that also—supposing that it was to be signed, I did not know anything about it—and then came away.

Question. Did you sign but one copy of the treaty?

Answer. I told you before that I signed one paper which the commissioners had, and another which the traders had; and I do not know what it was I signed.

Question. Who asked you to sign the 'Traders' Paper'?

Answer. They were missionaries, traders, half-breeds, and whites, all mixed up together; they are the ones I mean.

Question. Did the commissioners ask you to sign the 'Traders' Paper'?

Answer. The commissioners never told me to sign the 'Traders' Paper'; but, as I walked off, the traders asked me to sign another paper.

Question. Did you sign the treaty at the same time the Orphan signed it?

Answer. I signed it first.

Question. Was the treaty explained to you?

Answer. It was not.

Question. Was it ever explained to you, at any time?

Answer. After we signed the treaty we came to Mendota, and then they told us that we had signed a paper also for the traders.

Question. Was the treaty explained to you before or after signing it, by the interpreter?

Answer. Mr. Laframbois, Mr. Farribault, Mr. Bailey, and others who I do not now recollect, explained it. After it had been explained, we next went over to the commissioners with the paper.

Question. Were the commissioners present when the treaty was explained to the Indians?

Answer. They were not.

Question. Was it ever interpreted to you in the presence of the commissioners?

Answer. I never heard it interpreted in their presence.

Question. How much was you to receive at the payment last fall?

Answer. Two hundred and seventy-five thousand dollars.

—

E-TAY-WAH-KE-AN, Limping Devil, or Thunder Face, a chief of one of the See-see-toan bands of Upper Sioux Indians, sworn and examined as a witness.

Question. Did you sign the treaty at Traverse des Sioux, in July, 1851?

Answer. I did.

Question. Did you sign any other paper?

Answer. Yes; I signed another also.

Question. What was the other paper which you signed?

Answer. When I signed the commissioners' paper I walked off, and Mr. Riggs pulled me by the blanket and said, here is another paper, and I signed it also.

Question. Did you know what was in that paper when you signed it?

Answer. I did not know; but I signed it.

Question. Were you at the payment last fall?

Answer. I was.

Question. Did you hear the chiefs in open council direct Governor Ramsey how they wanted the money paid to them, under the treaty stipulations?

Answer. Yes.

Question. How did they direct it to be paid by him?

Answer. We went there three times, with *seven* chiefs, and demanded the money to be paid to us, and into our own hands. Governor Ramsey would not pay it to us, but said that he wanted to pay some of it to the traders; but I was not willing.

Question. Did you sign a receipt to Governor Ramsey for the two hundred and seventy-five thousand dollars?

Answer. I never signed any receipt for Governor Ramsey; I have no recollection of signing any paper of the kind. They sent after me seven times, in the night, and I would not go.

Question. Who came for you?

Answer. Mr. Laframbois and his son, and Louis came for me one night, seven times.

Question. Who did they say wanted you?

Answer. They said Governor Ramsey and Mr. Sibley wanted me.

E-TAY-WAH-KE-AN, or Limping Devil, cross-examined by Governor Ramsey and counsel.

Question. When the seven bands called on Governor Ramsey and demanded the money, were the chiefs all united in that demand?

Answer. I do not mean that we went there in open council.

Question. Did *you* not come in and object, because *you* did not get to sign first at the treaty?

Answer. I never said a word at the treaty. I signed the paper when I was called to do so.

Question. Who was the interpreter when you demanded the money of Governor Ramsey?

Answer. It was A. J. Campbell.

Question. How many chiefs were with you when you demanded the money?

Answer. Four of us. Running Walker, Red Iron, and the Little Rapids Chief, and myself.

Question. Had you been in council before making this demand?

Answer. We called on Mr. Sweetser and asked him how to demand it.

Question. Had you been in council before demanding it?

Answer. *We had a council* at Running Walker's (Tepee) tent or lodge, before going to demand it.

Question. Who was present at that council?

Answer. I did not notice any white persons there. Red Iron, Running Walker, Limping Devil, Little Rapids Chief, and all their braves were present.

Question. Were there any opposed to this demand being made?

Answer. We were all on the same side. We were all for getting our money. We came to the conclusion in that council to demand our money in our own hands, only three of the chiefs were not present.

Question. Was you at any councils at Fort Snelling?

Answer. I was not.

Question. Were you present at any councils at Mendota?

Answer. A good many years ago, I used to come there and talk to the agent; about thirty-five years ago.

Question. Do you know how much you were indebted to the traders when the treaty was made?

Answer. My father died thirty years ago, and I do not recollect of my people having any traders since; and I did not wish to pay the debts of those whose bones have been crumbling in the dust since that time.

Question. Have you had any credit with the traders since?

Answer. I was away off on the "*plains*" with my people hunting, with one hundred and fifty lodges or tepees; when I caught any furs, I

bought powder of the Indians, and when a trader would come along, I would buy cloth and blankets of him.

O-PEE-EN-DAH, or Big Curly Head, a chief of one of the Wah-pa-toan bands of upper Sioux Indians, sworn and examined as a witness.

Question. Did you sign the treaty at Traverse des Sioux, in July, 1851?

Answer. Yes. I signed it like the most of the chiefs.

Question. Did you sign any other paper at that time?

Answer. I have no recollection of signing any other paper but the one the commissioners had. When I signed that, I went away, and did not go where the others were signing the other paper.

Question. Was you present at the payment last fall?

Answer. I was not there.

Question. Did you sign a receipt to Governor Ramsey for the two hundred and seventy-five thousand dollars?

Answer. Since I signed the treaty paper, I have felt dissatisfied, and never went nigh them again; and have never signed any paper since.

Question. At the time you signed the treaty paper, did not your son and other braves oppose your signing that treaty?

Answer. Only my son; no other.

ISH-TAH-HUM-BAH, or Sleepy Eyes, a chief of one of the See-see-toan bands of upper Sioux Indians, sworn and examined as a witness.

Question. Did you sign the treaty at Traverse des Sioux, in July, 1851?

Answer. I did.

Question. Did you sign any other paper at that time?

Answer. I signed the commissioners' paper, and as I came by the other paper they wanted me to sign it, but I did not do it.

Question. Were you at the payment in the "*fall*" of 1852?

Answer. I was not.

Question. Did you sign a receipt for the two hundred and seventy-five thousand dollars *last fall* to Governor Ramsey?

Answer. I was not there.

Question. Did you, in "open council," request Governor Ramsey to pay your debts to the traders?

Answer. I do not know anything about it.

WAH-NOK-SOON-TA, or the Little Rapids Chief, a chief of one of the Wah-pa-toan bands of upper Sioux Indians, sworn and examined as a witness.

Question. Did you sign the treaty at Traverse des Sioux, in July, 1851?

Answer. Yes.

Question. Did you sign any other paper at that time?

Answer. I did.

Question. What was it about?

Answer. I signed one to send to the great father, and another to the traders. They pulled me along and told me to sign it.

Question. Were you at the payment "*last fall*," at Traverse des Sioux?

Answer. I was.

Question. Did the chiefs, in "open council," direct Governor Ramsey how they wanted their money paid?

Answer. I do not know anything about it. It was some time before I arrived there.

Question. Did you sign a receipt to Governor Ramsey for the two hundred and seventy-five thousand dollars?

Answer. I do not know anything about signing it. All I know, was, heading the chiefs in demanding the money.

Question. Have you signed any paper, since the treaty, for Governor Ramsey?

Answer. The only paper I recollect signing was when I was going to receive my money from Major McLean.

Question. Did you sign more than one paper before that to Major McLean?

Answer. No; only one paper at that time.

—

TAH-HUM-PAH-HEN-DAH, or Sounding Mocasín, a chief of one of the Wah-pa-toan and See-see-toan bands of upper Sioux Indians, sworn and examined as a witness.

Question. Did you sign the treaty at Traverse des Sioux in July, 1851?

Answer. I did.

Question. Did you sign any other paper on that day?

Answer. Yes; I signed the paper the commissioners had, and Mr. Riggs, when I was coming away, took me by the blanket and made me sign another paper also.

Question. Did any one explain that last paper to you?

Answer. When I signed the first paper, they told me I must sign the other also; and I signed it like the rest, without any explanation as to what it was.

Question. Were you at the payment "*last fall*" at Traverse des Sioux?

Answer. I was.

Question. Did you hear the chiefs in "open council" demand the money, due to them under the treaty, from Governor Ramsey?

Answer. When *these* old chiefs went and demanded the money, I was always with them, and heard them demand it.

Question. How did the chiefs direct the money to be paid?

Answer. They directed Governor Ramsey to give it to them, and in their own hands.

Question. Did the chiefs hold a council before they demanded it?

Answer. It may be that they did, but I had not as yet arrived there, or if they had any council, it was before I arrived there.

Question. Did you sign any paper for Governor Ramsey "*last fall*" at Traverse des Sioux?

Answer. I have no knowledge of signing any paper *for him at the time.*

Cross-examined by Governor Ramsey's counsel.

Question. Who was your trader?

Answer. A. J. Campbell.

Question. Who was the interpreter when the chiefs made the demand of Governor Ramsey for their money?

Answer. A. J. Campbell was the interpreter.

—

ANDREW ROBERTSON, sworn and examined as a witness.

Question. Where do you reside?

Answer. At the "Sioux Agency," in the Minnesota Territory.

Question. Were you at the treaty of Traverse des Sioux in July, 1851?

Answer. I was not.

Question. Were you at the payment, in the fall of 1852, at Traverse des Sioux?

Answer. I was.

Question. Did you hear the chiefs of the Wah-pa-toan and See-see-toan bands of Sioux Indians demand of Governor Ramsey in open council the money due to them under the treaty of July, 1851?

Answer. No; I was not present at any council, except that I was partly at one.

Question. Were you present when the chiefs signed any papers?

Answer. No; not the See-see-toan and Wah-pa-toan bands, except the pay-rolls for their annuities and provisions.

Question. Were you present at the treaty of August, 1851?

Answer. Yes.

Question. Were you present at the payment of the Indians last fall under the last-mentioned treaty?

Answer. I was.

Question. Did you hear the Indian chiefs in "open council" demand the money due to them under that treaty of Governor Ramsey?

Answer. I heard them demand payment to themselves, of what I understood to be their subsistence, traders, and half-breed money.

Question. Where was this demand made?

Answer. In the interpreter's house, at "the agency," generally used as a council house.

Question. What chiefs did you hear speak for their bands, in making this demand of Governor Ramsey?

Answer. I believe all, except the chief of the Crow village. I think that he was silent on that occasion.

Question. What reply did Governor Ramsey make to their demand?

Answer. The substance of Governor Ramsey's answer amounted to this: That it was proper that they should pay their traders, by whom they had been subsisted for years; and that he would not pay them that money, nor their "annuities," unless they consented to pay the traders seventy thousand dollars. He added, further, that if they refused to pay their traders, he should take the money back to Washington. He then said to the Indians, "Shall I take the money back to Washington?" The Indians answered "Yes;" and broke the council up.

Question. Were you present at any other council after that time at that place, or Mendota?

Answer. No; I was present when a portion of the half-breed money was paid to the chiefs.

Question. How much was paid to each chief?

Answer. I cannot tell how much was paid to each chief, but I think it was thirty thousand dollars, divided among seven bands.

Question. Where were these sums paid to the chiefs?

Answer. In the office of the Indian agent.

Cross-examined by Governor Ramsey and counsel.

Question. Tell who made the demand, and say whether it was not Wa-ba-shaw and another chief on one side, and Bad Hail, Good Road, and Little Crow on the other side?

Answer. It was just as I have said at first. It may be that some of them acted as you say, but that is not my recollection. It was the last council, just preceding the payment to the chiefs of the sums I have spoken of. I think Mr. Farribault and Mr. Prescott were the interpreters. It was during the first storm of that season.

Question. From your knowledge of the Indian character, what do you suppose the Indians would have done with their money? Would they have paid their debts, and retained twenty thousand dollars for their removal and subsistence?

Answer. It is a matter of opinion. I think the largest portion would have been given to the highest bidder in whiskey, and the balance of it would have set them to fighting, and ultimately the whole would have been wasted. I am led to think so, for that was nearly the result in regard to that which was paid over to them.

Question. How long have you lived in the Indian country?

Answer. Sixteen years.

Question. Have you had considerable to do with the Indians during that time?

Answer. I have had a good deal to do with them during all that time.

Question. From your knowledge of the Indians, do you attach any weight or credit to their evidence when they may be benefitted by it?

Answer. An oath I do not think amounts to anything with them; and I do *not attach much weight* or credit to Indian testimony—about

as much as I would to the evidence of white men when they are not governed by moral principles. To complete my answer, I say that an Indian will never hesitate to prevaricate when anything is to be gained by it.

Question. Did you have any discussion in the council you have alluded to?

Answer. My recollection is not perfect. This morning I said all that I can say. I think all the chiefs spoke for the money to be given into their own hands, except Little Crow.

Question. Do you recognize Wah-na-tah, No-hope-ton, and Sleepy Eyes, (the old man,) as chiefs of the Da-ko-ta or Sioux Indians?

Answer. I do.

Re-examined by the government commissioners.

Question. How often have you heard the Indians called upon to testify as witnesses?

Answer. I never heard an Indian called upon to testify until on this occasion.

Question. Do you say that you would not believe the chiefs who have testified in this case (named to you) on oath?

Answer. I have not sufficient knowledge of those Indians to say; but from what I do know, I think the same of them as of other Indians.

Question. With what band have you resided mostly?

Answer. With Little Crow's band.

Question. Are they not considered the most depraved of all the Dakotas, from their vicinity to and contact with the whites?

Answer. I do not think they are when speaking of the Med-a-wa-kan-toan bands. I think they are not more so than the lower bands generally.

—

HANOCK, a Dakota or Sioux Indian, who speaks and understands the English, as also the Sioux language, and who is also one of the tribe, sworn and examined as a witness.

Question. Were you at the treaty at Traverse des Sioux in July, 1851?

Answer. Yes.

Question. Did you sign the treaty?

Answer. Yes.

Question. Are you a chief of the Dakota tribe of Indians?

Answer. No.

Question. Did you sign another paper at the same time?

Answer. Yes.

Question. What was it about?

Answer. I do not know what.

Question. Was it explained to you?

Answer. No.

Question. How did you come to sign it?

Answer. After I signed the treaty paper, I was asked to sign another paper. The chiefs signed it, and I followed and signed it also.

Question. Have you learned since what that second paper was?

Answer. Yes.

Question. Did you write your own name?

Answer. Yes.

Question. Would you have signed it if you had known what it was?

Answer. Had I known what was in it I would not have signed it.

Question. Were you at the payment in the fall of 1852?

Answer. Yes.

Question. Did you hear the Indian chiefs in "open council" demand of Governor Ramsey to have their money paid into their own hands?

Answer. Yes.

Question. Where, and when?

Answer. At Traverse des Sioux, at one of the "mission" houses.

Question. Who was the interpreter on that occasion?

Answer. Joseph Campbell, Alexander Farribault, and Joseph Renville translated what was said.

Question. Were you made a chief by Gov. Ramsey?

Answer. Nobody ever made me a chief.

Question. Did you sign a receipt to Governor Ramsey for the two hundred and seventy-five thousand dollars?

Answer. No.

Question. Is Norapton, or No-hope-ton, a chief?

Answer. Since I was born I never knew him as a chief.

Question. Is O-tak-e-ta a chief?

Answer. I never knew him as a chief.

Question. What of Wah-na-ta, is he a chief?

Answer. His father was a chief among the Yankton's, but I never knew him (the son) as a chief.

Question. Where were you educated in the English language?

Answer. First I learned to read at Lac qui Parle, they then took me to Ohio, near Cincinnati.

Question. Do you profess the Christian religion?

Answer. Yes.

Question. What church do you belong to?

Answer. To the Presbyterian church.

Question. Is Wah-nok-soon-ta a chief?

Answer. Since my recollection, there were but two chiefs of the Wah-pa-toan but now there are three, and he is one of them.

Question. How long has Wah-nok-soon-ta been a chief?

Answer. I do not recollect exactly.

Question. What did Governor Ramsey reply to the chiefs when they demanded the money to be paid to themselves?

Answer. I recollect that the governor said: "Your great father has now finished, and I cannot pay it into your own hands." I heard him say this often.

Question. What else did Governor Ramsey say to the chiefs about it?

Answer. I do not recollect all he said.

Question. Were you at the treaty of the 5th of August, 1851?

Answer. No.

Question. How long since you came back from Ohio?

Answer. Ten years.

Question. What have you followed since that time?

Answer. I have hunted to clothe myself, and last summer goods to trade with the Indians.

Question. Did you trade with the Indians?

Answer. Yes.

Question. How many goods did you take up into the Indian country? Were they worth as much as one thousand dollars?

Answer. Yes, I expect so. I suppose pretty near a thousand dollars.

Question. Where did you get those goods from?

Answer. From an American, who keeps a store at Traverse des Sioux, named Mr. Sweetser.

Question. How did you sign your name to that treaty?

Answer. I signed both Hancock and my Indian name.

Question. What is your Indian name?

Answer. Mar-pi-yah-din-a-pee, is my Indian name.

Question. Were the Indians indebted to you at the Traverse des Sioux?

Answer. Yes, and some paid me when they got the money.

Question. In whose employment were you at Traverse des Sioux?

Answer. I had and traded goods on my own account.

Question. Were you not in the employment of Mr. Sweetser?

Answer. I was not. I only purchased goods from him.

Question. Had you not a claim against the Indians of about ten thousand dollars?

Answer. No. Who do you think would get that much credit? They never owed me that much.

Question. Did you not try to get the commissioners to allow you a sum of ten thousand dollars?

Answer. There were others, but some were not there.

Question. Do you know how many chiefs there are of that tribe?

Answer. Ish-tah-hum-bah, or Sleepy Eyes; O-pee-en-dah, or Big Curly Head; Mah-zah-shah, or Red Iron; Wah-min-day-ne-chah, or the Orphan; Wah-nok-soon-ta, or the Little Rapids Chief; E-tay-wah-ke-an, or Limping Devil, or Thunder Face; E-yang-mo-nee, or Running Walker, or Big Gun—making *seven* chiefs in all. There was also another chief, but he is dead.

—
ALEXANDER J. CAMPBELL, sworn and examined as a witness.

Question. Were you present at the treaty of Traverse des Sioux, in July, 1851?

Answer. I was not.

Question. Were you present at the payment at Traverse des Sioux, last fall?

Answer. I was.

Question. Did you hear the Indian chiefs, in open council, direct Governor Ramsey how they wanted their money due them under the treaty to be paid?

Answer. I heard them demand the money to be paid into their own hands.

Question. How often did you hear such a demand made?

Answer. Two or three times.

Question. Where was this demand made?

Answer. At the "mission house" of Mr. Huggins, at Traverse des Sioux.

Question. What reply did Governor Ramsey make to this demand?

Answer. He told them that he could not pay it to them, because they had given the traders a paper to pay their honest debts. Red Iron then asked him if that was the direction of the President. The governor replied: I do not know about it; I am here as the great father myself.

Question. How long have you lived in the Indian country?

Answer. I was born there; I am twenty-six years of age.

Question. Who acted as interpreter for the Indians?

Answer. I did. They asked me to go three or four times, and I went.

Question. Did you hear the chiefs, in "open council," ask Governor Ramsey to appoint persons to investigate the amount, and to ascertain how much they owed to the traders?

Answer. Yes. The Indians said, "We will pay our honest debts;" but they demanded that the traders should show their accounts. The governor said he had no business to do that; that they had already given the traders a paper to pay their debts.

Question. Were you present the morning Governor Ramsey left Traverse des Sioux for St. Paul?

Answer. I was not.

Question. Were you present at all the councils held at Traverse des Sioux, at that time?

Answer. No; I only went when the Indians asked me to go.

Question. What do you know of Governor Ramsey, Agent McLean, and Henry M. Rice assembling the Indians at Traverse des Sioux, prior to the payment?

Answer. I do not know anything about Governor Ramsey assembling the Indians.

Question. Do you know who are the chiefs of the See-see-toan and Wah-pa-toan Indians?

Answer. Yes. *First*, Running Walker; *second*, Big Curley Head; and *third*, Little Rapids Chief, are the Wah-pa-toans. The See-see-toans are: *First*, The Orphan; *second*, Limping Devil; *third*, Sleepy Eyes; and *fourth*, Red Iron. These are the *seven* chiefs that were living at the time of the treaty at Traverse des Sioux. No-hope-ton, or Noropton, and O-ta-ke-ta, I do not know as chiefs. They are not recognized by the Indians as such.

Question. How many chiefs, who are recognized by the Indians as such, appear to have signed Governor Ramsey's receipt on page 7, Senate document No. 29, part second (2)?

Answer. *Limping Devil* and *Little Rapids Chief* are all the chiefs on that receipt.

Question. Did you attend the payment of the lower bands at Fort Snelling, last fall; and if so, did you hear the chiefs direct Governor Ramsey, in open council, how they wanted him to pay the money due to them under the treaty of the 5th of August, 1851?

Answer. I was there, and heard the chiefs demand, in open council, to have their money paid to them in their own hands. To which Governor Ramsey replied that he would not so pay it. There were two chiefs who wanted to pay the traders—Little Crow and Little Six. Wa-ba-shaw said that he wanted the money; and if it was not paid to him, he (Governor Ramsey) might take it back to Washington. The council then broke up and the Indians all went off. I was at one council only where the Indians made the demand. The governor said if that was their wish, he would take the money back. If anything was said further, I do not now recollect what it was.

Question. Are you a half-breed of the Sioux nation?

Answer. I am a quarter-blood only.

Question. Was any of the half-breeds' money paid to you?

Answer. No.

Question. Did you apply for any of it?

Answer. I gave Mr. Sweetser a paper to draw my share; but he did not get any for me.

Question. Were you indebted to the American Fur Company?

Answer. No.

Question. Did you hear *Hanok's* testimony?

Answer. I did.

Question. State what you know about the paper to pay the traders and half-breeds, which was prepared by Hanok, and referred to in his testimony.

Answer. The morning they were going to the council with that paper I saw it, and they had a large number of the names of the half-breeds on it. The amount they had down for the half-breeds was sixty

thousand dollars, and for the traders seventy or eighty thousand dollars; and the balance they wanted themselves. Some was to be left in the hands of the government—I think forty or fifty thousand dollars. As they were going to the council they stopped at Mr. Sweetser's store and showed it to me, and I handed it to Mr. Sweetser to see how they had the paper drawn up among themselves.

Question. What do you know about the chiefs wanting their half-breeds to share in their money?

Answer. The chiefs wanted to pay some more and some less.

Cross-examined by Governor Ramsey's counsel.

Question. What do you mean by the remark that Governor Ramsey said to the chiefs that "I am here as the *great father* myself?"

Answer. I mean that Governor Ramsey said that he was there as the representative of the President.

Question. At what council was that demand made by the chiefs for the money?

Answer. It was made at Traverse des Sioux, at the "mission house," at two or three different councils.

Question. What white persons were present on these occasions?

Answer. Captain Monroe, Alexander Farribault, Mr. Bailey, Mr. McKenzie, and Mr. Sibley, and a whole lot of others, I cannot now recollect all.

Question. What took place at the council at Traverse des Sioux when (the chiefs) wanted Governor Ramsey to appoint some person to investigate the accounts, and to ascertain how much they owed their traders?

Answer. The Indian chiefs demanded their money in their own hands, when Governor Ramsey replied that they ought to pay their honest debts as white men do. Red Iron then sprang up and took the governor by the hand and said, that was what they wanted to do; that he wanted the books of the traders laid on the table, and if they wanted them to pay their debts like white people, they would do so; that he would pay the debts for those who were living, but not for those who had been dead long ago. I am certain I have stated correctly all I heard.

Question. Who of the chiefs were present?

Answer. Red Iron, Limping Devil, and Running Walker. Mr. Bailey interpreted in French and English. Mr. Sibley, Mr. Dousman, and Mr. McKenzie, and a good many others were there.

Question. Who was the interpreter at the council where they demanded the money of Governor Ramsey at Fort Snelling?

Answer. Mr. Forbes and Mr. Farribault.

Question. What chiefs demanded the money from Governor Ramsey?

Answer. Wa-ba shaw, Good Road, Cloud Man, Wah-coo-ta, and Black Dog, (or Grey Iron.)

Question. Where was this council held?

Answer. At Mr. Prescott's.

Question. Did all these *five* chiefs named make this demand of Governor Ramsey.

Answer. Yes ; one after another.

Question. Did any of the chiefs oppose this demand in council ?

Answer. Little Crow said that he wanted all the chiefs to pay their honest debts, and Little Six said the same thing.

Question. Was there not in that council a party opposed to paying the traders ?

Answer. There were a good many who would not pay them.

Question. Was there not also a party who wanted to pay a part to the traders, a part to the half-breeds, and to reserve a part to themselves ?

Answer. Yes ; that party was Little Crow's and Little Six's bands.

Question. Was there not a part who wanted all the money in their own hands ?

Answer. Yes ; the *five* chiefs before mentioned made such a demand.

Question. Did not Good Road want a part to be set aside for the traders, a part for the half-breeds, and a part for himself ?

Answer. Not in my presence.

Question. Was there not a part who wanted the money to put it into the hands of an agent ?

Answer. No ; I did not know it, nor hear it. I belong to the Wah-pa-toan blood.

—

XAVIER FRESNIER, sworn and examined as a witness.

Question. Were you at the treaty of Traverse des Sioux in July, 1851 ?

Answer. Yes.

Question. Have you any knowledge of the signing of the treaty by the chiefs ?

Answer. Yes ; I saw them sign it.

Question. Did you see them (the chiefs) sign what is called the "Traders' Paper" also ?

Answer. Yes ; I saw them sign it.

Question. Was it explained to the chiefs before or at the time they signed it ?

Answer. I did not hear it explained.

Question. Did you hear the chiefs in open council direct Governor Ramsey how to pay their money under the treaty at the time they signed it ?

Answer. They did not say anything to him then to my knowledge.

Question. Were you at the payment in the fall of 1852, at Traverse des Sioux ?

Answer. Yes.

Question. Did you hear the chiefs in open council direct Governor Ramsey how they wanted their money paid, which was due to them under the treaty ?

Answer. I heard the chiefs, in all the councils, demand the money to be paid to them together. The governor made them this reply : "When you, the chiefs, sign a paper, then I will give you all the

money." The Indians said they wanted the money in their own hands; that they would then give a share of it to their traders, a share to their half-breeds, and they would keep a share of it for themselves. I did not hear Governor Ramsey mention anything more.

Question. Did you see the Indians sign a receipt to Governor Ramsey for two hundred and seventy-five thousand dollars, (\$275,000?)

Answer. I do not know of any person who signed such a receipt.

Question. Do you speak the Sioux language well?

Answer. I do. I was born and brought up among them.

Question. How long have you traded with the Sioux Indians?

Answer. I have traded on and off with them for eight years.

Question. How many chiefs are there, who are recognized by the Indians as such, of the Sec-see toan and Wah-pah-toan bands of upper Sioux?

Answer. There were *eight* formerly, but one of them is dead. The Wah-pa-toan chiefs are, E-yang-mo-nec, sometimes called "Big Gun," but most frequently "Running Walker," Wah-nok-soon-ta, or the "Little Rapids Chief," and O-pee-en-dah, or "Big Curley Head," making *three* in number. The Sec-see-toan chiefs are, Mah-zah-shah, or "Red Iron," Ish-tah-hum-bah, or "Sleepy Eyes," E-tay-wah-ke-an, "Limping Devil," or "Thunder Face," and Wah-min-da-ne-chah, or the "Orphan," *four* in number, and making *seven* in all. These are all the chiefs now living.

Question. See Senate document No. 29, part 2, and page 7, and say how many are chiefs who have signed the receipt to Governor Ramsey for the two hundred and fifty thousand dollars, (\$250,000,) which is dated November 29, 1852.

Answer. E-ta-wah-ke-an, or the Limping Devil, and Wah-nok-soon-ta, or the Little Rapids Chief, are the only two. Wah-na-ta is a chief of the Yankton tribe of Sioux; the others are all soldiers. Two, I do not know.

Question. Was you paid, or did you receive any money under that treaty?

Answer. I did—in Mr. Sibley's house in Mendota.

Question. How much did you receive?

Answer. It amounted to eight hundred and fifty dollars, and I was paid in paper money.

Question. Was any of this money due to you as a half-breed?

Answer. It was.

Question. Was you entitled to eight hundred and fifty dollars as a half-breed?

Answer. I have five children and myself, which make *six*, and the others were paid two hundred and fifty dollars each. I received but eight hundred and fifty dollars, when I was entitled to fifteen hundred dollars. There was a list of the names of the half-breeds made out at the time of the treaty, and they were to get forty thousand dollars in all—making two hundred and fifty dollars to each.

Question. Who made out that half-breed list?

Answer. Mr. Sibley.

Question. How long after the treaty was signed?

direct Governor Ramsey now they wished him to pay the
the treaty of August, 1851?

Answer. I do not know that I did. I do not recollect m

Cross-examined by Governor Ramsey's couns

Question. Are you related to the Sec-see-toan, Wah-
Med-a-wa-kan-toan bands?

Answer. I am related to the Sec-see-toans, Wah-p
Med-a-wa-kan-toans.

Question. Do you speak the English language?

Answer. I do not. I was brought up among the Indian

Question. Have you always resided among them?

Answer. I have been among them for thirty years.

Question. Are you a chief?

Answer. I am not.

Question. Are you a soldier or brave?

Answer. I am not.

Question. Where do you live?

Answer. I have no settled home.

Question. How did it happen that you were at Traverse

Answer. I went for my portion of the half-breed money

Question. Was you put down on the list as a half-breed

Answer. Yes.

Question. Were you in all the councils at Traverse des

Answer. I have named all before.

Question. How many councils were you in at that place

Answer. I do not know exactly. I was at the councils
held on two or three different days

Question. Did you hear the chiefs in open council direct Governor Ramsey how they wanted their money paid?

Answer. I did. They asked the governor to give them all their money together; and that they wanted to have twenty thousand dollars added to the forty thousand dollars for their half-breeds. They then wished seventy thousand dollars to be paid to their traders, and the balance they wished to have for themselves.

Question. Where was that council held?

Answer. They said this in their own lodges; and drew up a paper for Governor Ramsey to see, and brought the paper to the governor before he left, and gave it to him in one of the "mission houses," where he was staying.

Question. Did you see that paper presented to Governor Ramsey?

Answer. Yes; I heard it read, and saw it presented it to the governor.

Question. Who drew up that paper!

Answer. Hanok drew it up.

Question. Was your name down on that paper?

Answer. It was.

Question. What was the amount fixed opposite to your name, as the sum you were to receive?

Answer. Eight thousand dollars.

Question. Is this the paper you allude to, when you say they demanded the money of Governor Ramsey?

Answer. The chiefs first demanded the money with their *own mouths*, and when the governor would not give it to them, they went off and made this paper of which I have spoken.

Question. Who was present when they made the demand?

Answer. A great many persons. Mr. Dousman, Mr. Sibley, Mr. McKenzie, and Mr. Tyler. The house was full. I looked through the window and saw them.

Question. What chiefs made the demand?

Answer. Mah-yah-shah, or Red Iron; E-tay-wah-ke-an, or Limping Devil; E-yang-mo-nee, or Running Walker; and Wah-nok-soon-ta, or the Little Rapids chief—*four* in all. There were none others present, but that man, (Tah-hum-pah-hen-dah, Sounding or Rattling Moccasin,) who was made a chief.

Question. How many half-breeds were on the list of which you have spoken?

Answer. I do not know exactly.

—

JOSEPH M. MARSHALL, sworn and examined as a witness.

Question. Will you look at Senate document No. 29, part 2, page 8, and say whether you are of the firm of Marshall & Co., as therein stated?

Answer. Yes, I am one that firm.

Question. Did your firm have a contract with the government for supplying the Sioux Indians with provisions?

Answer. The contract was awarded to us, but Agent McLean was absent, and there was some neglect in furnishing the papers, for what reason I do not know. We went on with the contract agreeably to the advertisement upon which we based our bid, and furnished the provisions that are here described in this document, of \$4,438, for the See-sec-toan Sioux Indians, which provisions were accepted by the government agents, and they were charged for them according to the terms of our bids.

Question. How much were the United States indebted to you?

Answer. (\$4,438,) four thousand four hundred and thirty-eight dollars.

Question. From whom did you receive payment for this account against the government?

Answer. From Governor Ramsey.

Question. In what kind of funds were you paid?

Answer. There were (\$4,400) four thousand four hundred dollars paid to us in paper money, and thirty-eight dollars in American gold. This was paid in Governor Ramsey's own house, December 4, 1852. It was paid to one person, and I gave the receipt which is copied on this 8th page of Senate document No. 29, part 2. Governor Ramsey accepted and received the receipt from me, which is dated December 4, 1852, for (\$4,438) four thousand four hundred and thirty-eight dollars.

JOSEPH M. MARSHALL, cross-examined by Governor Ramsey's counsel.

Question. Did you not furnish these provisions without any distinct understanding?

Answer. There was no distinct understanding further than I have mentioned.

Question. Were you not offered the gold at the time of this payment to you?

Answer. The governor asked me if I preferred the gold, or would paper money answer me as well. I replied that I should prefer the paper money.

Question. Did you loose anything on that paper money?

Answer. No, we lost nothing on it. It answered our purpose just as well as the gold.

Question. What bank was it on?

Answer. It was all on the Merchants' Bank of New York city, in one hundred dollar bills.

Question. Could you have had the gold if you had preferred it?

Answer. I suppose I could.

Question. Did Governor Ramsey enter into any contract with you for these provisions?

Answer. No; nor with our firm.

Re-examined by the government commissioners.

Question. Did you present an account of these provisions to agent McLean for payment?

Answer. I did present it, as it appears on page 8 of Senate document No. 29, part 2.

Question. Did agent McLean append his official certificate, as appears on this document No. 29?

Answer. He did, and I then presented it to Governor Ramsey, and he paid me the money, as I have stated.

—

ALEXANDER GRAHAM, sworn and examined as a witness.

Question. Were you at the treaty of Traverse des Sioux in July, 1851?

Answer. I was. I saw the Indians signing it.

Question. Did you see Mr. Brown have another paper?

Answer. I saw him sitting there, but did not see any paper.

Question. Did you see any other paper signed by the Indians on that occasion?

Answer. The Indians signed another paper, but I did not see it. Some one called out to me to tell the next one to sign. I told them to go and sign the treaty.

Question. Did you see the so-called "Traders' Paper" that day?

Answer. I did not, but I heard some talk of it.

Question. Was that "Traders' Paper" explained to the Indians?

Answer. It was explained that day to the Indians.

Question. By whom?

Answer. By the interpreters, Mr. Riggs and Mr. Alexander Farri-bault.

Question. Who did they interpret for?

Answer. For that one legged man who came to make the treaty.

Question. Did they take up that paper and explain it properly to the Indians?

Answer. I did not see that.

Question. What did Colonel Lea say was in that Traders' Paper?

Answer. That so much money was to be paid to them, and so much to their traders, and some for removal, &c.

Question. What Indian chiefs were present at that time?

Answer. Sleepy Eyes, Red Iron, and Running Walker.

Question. Did these chiefs sign that Traders' Paper?

Answer. I saw them going towards Governor Ramsey and Colonel Lea. They said they had two papers; Red Iron said so.

Question. Were you a clerk of the American Fur Company?

Answer. I was.

Question. Were you at the payment at Traverse des Sioux last fall?

Answer. I was.

Question. Were you present at any council with the Indians?

Answer. No; I was sick in bed.

Question. Were you at Mendota or Saint Peter's agency at the payment last fall?

Answer. I was.

Question. Were you in any council with the chiefs and Governor Ramsey?

Answer. No.

Question. Did you hear any conversation between the chiefs and Governor Ramsey?

Answer. No.

Question. Did you ever hear Governor Ramsey say that he would turn the prisoners out of custody if they would sign a receipt to him for their money?

Answer. No.

Question. Did you get any money from the half-breed payment?

Answer. Yes.

Question. How much did you receive?

Answer. Over three hundred dollars.

Question. In what currency was that paid to you?

Answer. In paper money.

Question. Are you a half-breed Sioux?

Answer. I am.

Question. Who paid you that money?

Answer. It was paid by Frederick Sibley.

Question. Where was it paid to you?

Answer. At Mendota.

Question. Who told you to go to Frederick Sibley for your money?

Answer. He told me, (Mr. Frederick Sibley.)

Question. Did any one else tell you to go to him?

Answer. No. It was after Mr. Tyler had left.

Question. Did you authorize Hugh Tyler to draw your money?

Answer. Mr. Sibley asked me to sign a paper to draw my money, and I did so.

Question. Where did you sign that paper to draw your money?

Answer. At Mr. Sibley's store, at Traverse des Sioux.

Question. When did you sign this paper at Traverse des Sioux?

Answer. About the time of the payment last fall.

Question. Did Mr. Sibley tell you that you had to lose *fifteen* per cent. out of that half-breed money?

Answer. No. When he gave me the money, he said that was all.

Question. Is that your signature, (showing witness a paper,) same as is copied on Senate document No. 29, page 32?

Answer. Yes.

Question. Were you present the night after the treaty, at a council?

Answer. No.

Question. Were you present at a council at Mr. Prescott's, where Major McLean and the Med-a-wa-kan-toan chiefs had a talk at Fort Snelling last fall, before the payment?

Answer. Yes. They met there to get their money; they took a paper there to Major McLean. Major McLean read it, and after it was read an Indian came in and took the paper and tore it up.

Question. Did the Indians in that council conclude to ask or demand of Governor Ramsey the money due to them under the treaty into their own hands?

Answer. They did.

Question. Did they go to Governor Ramsey afterwards, and demand the money, as they had agreed to do in council?

Answer. I did not see them go; but that is what the council was held for.

Question. Was Wa-ba-shaw there?

Answer. Yes.

Cross-examined by Governor Ramsey's counsel.

Question. At what time of day was this council held?

Answer. About (10) ten o'clock. A former council was held at Samuel Finley's. I was not there all the time.

Question. Who was in that council?

Answer. Mr. Sweetser and Mr. Van Etten.

Question. Was there any paper prepared in the presence of Major McLean?

Answer. No. The council held at Samuel Finley's was to make arrangements to get their money under the treaty. They thought they had paid enough to traders, and wanted their money among themselves.

Question. Was it not specified in that paper that the half-breeds were to receive eighty thousand dollars?

Answer. It was not the intention of the Indians to give that much, but it was so read at Major McLean's, and so interpreted by Mr. Prescott, that the half-breeds were to receive all the money.

Question. Was it not stated in that paper, that the Indians were to set aside some twenty thousand dollars for their removal, and seventy thousand dollars to be paid to their traders?

Answer. I do not know anything of the kind. I have said all I know.

Question. Was there not a division in this council?

Answer. I do not know. Little Crow was against the paper, but no one else that I know of.

Question. Were there not some for giving more to half-breeds and some less.

Answer. There was a difference of opinion in that respect.

—

DAVID OLMSTEAD, sworn and examined as a witness.

Question. Were you present at Traverse des Sioux, at the payment last fall?

Answer. I was present at the time the payment was made.

Question. Did you attend any council at that place?

Answer. I did not attend any council where the Governor was present. I did attend one where agent McLean was present.

Question. What was the object of that council?

Answer. I heard some talk between the Indians and the agent, the substance of which was that the Indians wanted their money as stipulated in the treaty. They also made complaint about some of their *old chiefs* having been broken, and *young ones* substituted in their places. They further complained that their money had not been paid according to the treaty; that they wanted it paid to themselves and would not

be satisfied without it. That they would not remove unless they got their money as stipulated in the treaty. There was a paper signed directed to the President of the United States, and another to Governor Ramsey. The latter paper was a "*protest*" against the payment of the money to the traders, under the 4th article of the treaty, without having their accounts investigated. The "*protest*" to the President was setting forth the facts. The paper to Governor Ramsey was of the nature of a demand to have their money paid to themselves. I witnessed one, and I made a rough draught of one, and perhaps both. I am under the impression that one was written by Hanok, an educated Sioux Indian, and the other by Joseph Campbell. I heard both papers interpreted to the Indians, and I think both interpreters were sworn on both occasions.

I also saw the Indians sign both papers. There were from fifteen to twenty chiefs and headmen present; but I have no exact recollection of how many were there. But all who were there signed both papers. Both of these papers requested an investigation of the traders' claims, by persons to be appointed. One of the papers the chiefs took to present to Governor Ramsey. The other was to be sent to Washington. This was before the half-breed payment and "hand-money" payment were made, and distribution at Mendota.

Cross-examined by Governor Ramsey's counsel.

Question. Where was this council held of which you have spoken?

Answer. It was at Mr. Sweetser's store at Traverse des Sioux.

Question. Who were present at this council?

Answer. Mr. Huggins, Mr. Shaffer, Mr. Fuller, Mr. Merrick, and another Mr. Huggins, and Captain Dodd, who took the acknowledgment. The other council was held at the same place.

Question. Who were present at the other council?

Answer. I think pretty much the same persons, and I think agent McLean also.

Question. Did you see these papers after they were taken by the chiefs?

Answer. I saw Red Iron take one of the papers with the express purpose of presenting it to Governor Ramsey. I do not know whether he did present it to him or not.

Question. Was there anything said as to who was to investigate the traders' accounts?

Answer. I understood that commissioners were to be appointed, but I cannot say whether all this was embodied in the paper or not. There were some names mentioned. I think one was agent McLean, another Mr. Sweetser, Dr. Williamson also, and some one else. I think Col. Lea was also mentioned. This was after a part of the money had been paid. I mean the "*annuity*" money.

—
THOMAS ODELL, sworn and examined as a witness.

Question. Were you at the treaty of Traverse des Sioux in July 1851?

Answer. I was there a short time.

Question. Were you at the payment under that treaty at Traverse des Sioux last fall?

Answer. Yes.

Question. Were you present at any of the councils?

Answer. No.

Question. Were you employed by Governor Ramsey for any purpose connected with that treaty or payment?

Answer. Not that I know of. Not by his employment.

Question. What did you go there for?

Answer. I went to take charge of a drove of cattle.

Question. Were you present at any council of the Indians when Governor Ramsey was present?

Answer. No, I was not.

Question. Were you at Mendota when the half-breeds were paid?

Answer. Yes.

Question. Who paid the money to them?

Answer. Hugh Tyler paid all that I saw paid to them.

Question. What kind of funds were they paid in?

Answer. I saw some of it paid in bank notes and some in gold.

Question. About in what proportion were they so paid?

Answer. I cannot tell.

Question. Did you receive any money yourself for any half-breed or half-breeds?

Answer. I received two hundred and twelve dollars and fifty cents for Mary Louise, an orphan girl, who lives with me. She is a half-breed Sioux and belongs to the Lac qui Parle band. This was a month after the others were paid.

Question. In what kind of funds were you paid?

Answer. I was paid two hundred and ten dollars in paper money, two dollars in gold, and fifty cents in silver.

Question. Did you act as the agent for this half-breed girl?

Answer. I did. Governor Ramsey told me there was some money set apart for her. I signed no power of attorney to any one to draw this money.

Question. Did you receive any money for yourself at the half-breed payment?

Answer. I received one hundred and thirty-two dollars and forty cents for a demand I had against the Indians. I received one hundred and thirty-two dollars in paper money. Mr. Dousman handed it to me. I received it on account of the claim filed, marked K, Senate document No. 29, page 36, which I now see before me.

Question. What per cent. was deducted out of your claim against the Indians?

Answer. When I saw Hugh Tyler he said that he would pay me, but that there would be *fifteen* per cent deducted out of it. I never had authorized him or any one else to draw it for me or for her.

Question. Did you hear the chiefs of the lower bands demand of Governor Ramsey to have their money paid into their own hands?

Answer. Yes, at the council house or agency, near Fort Snelling.

Question. What reply did Governor Ramsey make when they demanded the money?

Answer. Governor Ramsey told them that he wanted them to pay their debts before they went to their new homes. The chiefs replied that they wanted the money paid over to themselves. The governor told them he could not pay it to them. The chiefs then said that he could take the money back, and the land should be theirs again.

Question. Was this demand before or after the payment?

Answer. It was before the payment.

Question. What did the chiefs then do or say?

Answer. They went out of the council house, and that was all.

Cross-examined by Governor Ramsey's counsel.

Question. Who interpreted at the council of which you have spoken?

Answer. I cannot say who. I do not recollect whether it was Mr. Forbes or Mr. Farribault.

Question. What chiefs were there?

Answer. I cannot name them all, but the "Cloud Man" was there.

Question. Was there any division among the chiefs, as to what they wanted to do with this money?

Answer. Not that I know of.

Question. Did not some wish the governor to pay their debts, and some to *have it paid* to themselves?

Answer. I heard some such remarks made.

Question. Did you not hear some who were for paying their debts, some for paying their half-breeds so much, and some for setting it apart for their removal and subsistence?

Answer. I heard some such talk, but I do not know where I heard it.

Question. Did you not marry a half-breed of the Med-a-wa-kan-toan Sioux?

Answer. I did; but never got any half-breed money on her account, although I was as much entitled to it as any of the others.

Question. How much was set apart for the Med-a-wa-kan-toan Sioux half-breeds?

Answer. I do not know.

Question. Did the claim of McBoal and Odell include all your claims against the Indians?

Answer. It did; we were partners. It was the only claim I had against the Indians.

Question. Had McBoal any other claim?

Answer. Not that I know of.

Question. What is McBoal's Christian name?

Answer. James McBoal.

Question. Is that Mr. McBoal's name on page 35, Senate document No. 29?

Answer. It is.

Question. Was this little girl included in the half-breed list?

Answer. I do not think she was.

Question. Was it not through Governor Ramsey's influence that this little girl was put upon the list?

Answer. I asked Governor Ramsey to have it put on the list. I do not know whether it was his influence or not; but I got the money for her. I received this about a month after the payment. I heard the governor read over a list of the half-breeds at Traverse des Sioux.

WILLIAM HARTSHORN, sworn and examined as a witness.

Question. How long have you lived in the Indian country?

Answer. About eleven years.

Question. Were you at the treaty at Traverse des Sioux in July, 1851?

Answer. Yes.

Question. Were you present when the treaty was signed by the Indians?

Answer. I think I was, and saw it signed.

Question. Did you see the so-called "Traders' Paper" signed also?

Answer. No.

Question. Did you hear of any paper relating to the distribution of the "hand-money" among the traders being interpreted to the Indians?

Answer. I did not hear of any such paper being interpreted then, or at any time. I was present at all the open councils, and would have been likely to have heard it, if it had been done. I might have missed some councils, but I do not recollect that I did. I was on the ground all the time.

Question. Did you hear the fourth article of the treaty, relative to the manner in which their money was to be paid to them, explained to the Indians?

Answer. I think I did hear that clause explained.

Question. What construction did the commissioners put upon that clause?

Answer. They explained it just as it read. The Indians were to have it paid to themselves, and to no other person. I have no further explanations to make. I was not at the payment.

Question. Were you at Mendota when the half-breeds were paid their money?

Answer. Yes, and saw a good many of them paid. They were paid by Hugh Tyler. He handed the money over. Most of it was in packages of paper money, which he laid on the table or desk. When a half-breed was called, the money was counted out, and then the half-breeds touched the pen to their signatures, and some wrote their own names. Mr. Tyler was standing by at the time. If they owed the fur company anything, Mr. Steele, Mr. Forbes, or Mr. Sibley, then stepped up, and presented a paper, and took the money, and told the half-breeds they owed them so much, and took the money. If the half-breeds owed them nothing, they handed the money over to them. Very few of those that I saw but what owed the fur company something. I did not see anything but paper money paid, except the change; I think, but am not certain, that I saw one sovereign paid out to them. I saw a dozen or two half-breeds pass out and in. Mr. Forbes and Mr. Steele got the most of their money.

Question. Did you have a claim against the Indians?

Answer. Yes.

Question. Were you a licensed trader?

Answer. I was not all the time. I was part of the time, for one year, with Mr. Randall.

Question. Had you a claim against the upper Sioux Indians?

Answer. I had.

Question. How much were you paid, by whom were you paid, and in what kind of funds?

Answer. I was paid four hundred and fifty dollars (\$450) and some small change, by Hugh Tyler—all in paper money, except fifty (50) or sixty cents in change. I was allowed five hundred and thirty dollars, (\$530,) and they deducted *fifteen* per cent. I asked them what it was for, (the fifteen per cent.,) and Mr. Sibley or Governor Ramsey, both standing by, told me it was for expenses. Mr. Tyler asked me if I was satisfied and willing to sign the paper. I said to him that I supposed I would have to be satisfied, and signed it without any further words. They had a paper with the names of the creditors of the Indians on it, and the sums carried out, deducting the fifteen per cent.; and I think the words "for expenses" were interlined, or between the columns.

Question. Did you sign a power of attorney, before that time, for Hugh Tyler to draw your money?

Answer. Not to my recollection. I do not recollect to have signed any paper for Mr. Tyler but that one.

Question. Where did you sign that paper?

Answer. I signed it at Mr. Sibley's house, in Mendota.

Question. When did you sign it?

Answer. It was after the river was frozen over; I think in January or December last, 1852 or 1853. I remember now that it was in December, 1852.

Question. Are you certain you did not sign a power of attorney to Hugh Tyler, on the 23d of July, 1851, to draw your money, as a creditor of the Indians?

Answer. I am not certain; but I do not recollect to have done so.

Question. Look at the power of attorney to Hugh Tyler on Senate document No. 29, pages 28 and 29, and see if you signed that paper at Traverse des Sioux?

Answer. I certainly did not, because I was not there in 1852.

Question. Do you know why Hugh Tyler paid that money out to the traders and half-breeds, instead of Governor Ramsey?

Answer. I do not.

Question. Was Governor Ramsey present when Tyler, or Sibley, or anybody else, were paying out this paper-money to traders or half-breeds?

Answer. He was present when Hugh Tyler paid me, sitting at the same table.

Question. Were these paper-money bills new bills, or were they worn more or less by use?

Answer. Most of them were new bills; one seemed to have been handled some.

Question. What bank were they on?

Answer. They were all on one bank. Mine was paid in fifty dollar bills. The traders went in, one at a time, to get their money. There was no trader there who did not belong to the American Fur Company. The bills were on a New York bank.

Question. Was Governor Ramsey present in the room of Mr. Sibley at Mendota when these traders were being paid?

Answer. He was in there when I was paid. Governor Ramsey, Mr. Steele, Mr. Tyler, and Mr. Bailey were present, and the governor did not get up. This was in December, 1852. Mr. Steele came out of the room after me, and crossed the river with me. He said that if they did not do what was right, and allow him his claim, he be damned if he would pay the fifteen per cent.; and that he would go to Washington and blow the whole thing up, or expose them. That he could do so just as well as not if they did not pay his claim.

Question. Did you talk to Governor Ramsey about your claim?

Answer. I did. He told me he hoped the traders would settle it among themselves as to how much they would receive. This was about the time of the payment.

Cross-examined by Governor Ramsey's counsel.

Question. Mention all you can remember about who were in that room at Mr. Sibley's?

Answer. I have told you who I think were there. Mr. Dousman, Mr. Bailey, Governor Ramsey, Mr. Steele, Mr. Sibley, and Mr. Tyler, according to my recollection.

Question. Did Governor Ramsey have anything to do with that payment?

Answer. No.

Question. Did he say anything to you about it?

Answer. Governor Ramsey or Mr. Sibley, one of the two, asked me if I was satisfied about the *fifteen* per cent.?

Question. Did you receive the money from Governor Ramsey?

Answer. No; I did not.

Question. Did he count the money out for you?

Answer. No.

Question. Did he look at your account, or at any of your papers?

Answer. No, not to my knowledge.

Question. What interest has Alexis Bailey in the American Fur Company?

Answer. He has always been in their employment, and a part of his claim, for a number of thousand dollars, was to go to that company.

Question. Did Mr. Steele's money go to the American Fur Company?

Answer. Not to my knowledge.

Question. Was Mr. Dousman's money to go to the American Fur Company?

Answer. I know that he was an old member of that company, and used to be a partner.

Question. Were you in all the councils at Traverse des Sioux?

Answer. I was at all open councils, to the best of my knowledge. I never left the ground for six weeks. I was not a mile from the camp, to my knowledge, during the time.

Question. Who explained the 4th article of the treaty to the Indians?

Answer. I do not recollect which of the two commissioners; sometimes Governor Ramsey spoke, and sometimes Colonel Luke Lea.

Question. Did you hear it explained more than once?

Answer. I do not recollect.

Question. Do you speak the Sioux language?

Answer. Not well. I understand a good deal of it. I do not speak it well enough to understand what is said in council.

Question. Who interpreted in that council?

Answer. I do not know of any one but Alexander Farribault. I think he was the interpreter.

Question. State the language of the commissioners in the explanation they gave of the treaty?

Answer. I have stated it to be as it was written in the treaty.

Question. Were there any half-breeds paid off at Mendota, who retained all their money from the company?

Answer. Yes. I think I saw some who retained it all.

Question. Had you ever a "license" to trade with the Indians in your own name?

Answer. I never was a licensed trader only as the partner of Mr. Randall, who had a license, and I traded with him for two years.

The original power of attorney given by the traders to Hugh Tyler were here exhibited to Mr. Hartshorne, when he admitted that he had signed it. He said that it was his signature, but that he had no recollection of ever having seen that paper before. That at Traverse des Sioux, after the treaty was made, the traders met and appointed a committee to examine and allow the respective claims of each. That this committee was appointed by Mr. Sibley, Mr. Dousman, Mr. McLeod and others. That they allowed him only five hundred and thirty dollars out of eighteen hundred dollars.

Question. Were you sworn to the correctness of your account?

Answer. I was sworn to my account by Mr. Smith, a notary public, first, and then before Governor Ramsey.

Question. Were you allowed any of that nine thousand dollars?

Answer. No.

WILLIAM H. RANDALL, sworn and examined as a witness.

Question. Please state your occupation, and how long you have resided here in Minnesota Territory?

Answer. I came here in 1846; and in 1847 I entered into partnership with William Hartshorne in the Indian trade, under a license from the government in 1847 and 1848.

Question. Did you have a claim against the Indians?

Answer. I had a claim for our company, and also a claim for Hartshorne, which was assigned to me. I put in my claim before Governor

Ramsey, and swore to it. I called on the governor several times to know if it was going to be paid, both before and after I had put it in. He told me none but "*licensed traders*" should be paid. That he wanted to do justice to all parties, but could pay none but "*licensed traders*." At the time the money was taken up to Mendota by Hugh Tyler I went up with him. I then examined the list and found that my name was left off. I returned and called on Governor Ramsey to know why my name was not on the list. He said that he did not know. That he had trusted to Mr. Prescott, who furnished him with the list. I said to him that I had sworn that I had traded with the Indians under a license. He then advised me to go up to Mendota next morning, and request Mr. Tyler to postpone the payment until I could go to the agency and get a copy of my license. I went there next morning and found that the payment had been made the evening before. I did not get my money. They did not allow me anything on my claim.

The day after the payment the traders, through Mr. Tyler, gave me nine hundred and fifteen dollars, saying that it was on account of my gentlemanly conduct towards them. They would not admit that I had any claim, and it had nothing to do with my debt or claim, as they said, that it was out of their own private purse.

Question. In what kind of funds were you paid by Hugh Tyler?

Answer. In paper money.

Question. On what bank?

Answer. On a New York city bank.

Question. Who were present when he paid you this money?

Answer. Mr. H. H. Sibley, Mr. Dousman, F. B. Sibley, Mr. Forbes, and Mr. Tyler.

Question. Why was it just nine hundred and fifteen dollars?

Answer. They took a per centage off of each claim, and it came to that sum.

Question. In whose hands did you find this list of traders?

Answer. In Hugh Tyler's hands.

Question. Where was this payment made?

Answer. In Mr. Sibley's office. I went up with Mr. Tyler, and he had the money with him.

Question. Did Governor Ramsey ever tell you why he paid the money to the traders through Hugh Tyler?

Answer. He said to me, that the traders had given Hugh Tyler a power of attorney to receive their money.

Question. What did he say in regard to the payment by Hugh Tyler?

Answer. He said that he paid it to Tyler in bulk, as he, Tyler, had receipted for the whole.

Question. Were you present at any council with Governor Ramsey and the Sioux chiefs before the payment was made?

Answer. I was at one, at the St. Peter's agency.

Question. Did you hear the chiefs at that council demand of Governor Ramsey that their "hand money" should be paid into their own hands?

Answer. I did hear them demand their money to be paid into their

own hands. The reason they gave was, that they had overpaid the company, and that they owed other debts and traders, and wanted the money paid into their own hands, so that they might pay them. They said that the company had received ninety thousand dollars from Governor Ramsey, and that overpaid them. The governor then asked, who said he had paid the American Fur Company ninety thousand dollars? The reply of the chiefs I do not recollect. The governor then said, he would return the money unless they did something, which, I think, was, that they should sign some papers. The Indian chiefs said he might return it, and they would keep their lands, and they then broke up the council.

Question. Were you at the half-breed payment?

Answer. I was, when a few of them were paid.

Question. Who paid them?

Answer. Hugh Tyler handed the money over to H. H. Sibley, and Mr. Forbes, and they then deducted the amount of the accounts which the half-breeds owed to the company, and gave them the balance which was left.

Question. In what kind of money were they paid?

Answer. It was paid in paper money, except small change.

Question. Who were there, taking part in this payment?

Answer. Mr. Tyler, Mr. Dousman, Mr. Sibley, and Mr. Forbes.

Cross-examined by Governor Ramsey and counsel.

Question. Were you in the interior office, where they were paid?

Answer. I was not. I was in the adjacent room. I sat near the door where I could see into the interior office.

Question. Are you sure that the money was first passed by Mr. Tyler to Mr. Sibley?

Answer. I am not certain. I saw two or three half-breeds paid by Mr. Sibley and Mr. Forbes. There might have been as many as twenty paid while I was there, but I did not see who paid them all.

Question. What chiefs were present at the council of which you have spoken?

Answer. I do not know them, certainly, only from hearsay. I was not in the room. I was only where I could hear what was said.

Question. Are you certain that Governor Ramsey was there?

Answer. I heard his voice.

Question. Who was the interpreter?

Answer. Mr. Forbes and Alexander Farribault. I heard no papers read to my knowledge. I do not know who called that council.

Question. When was this council held?

Answer. I think in the latter part of November or first of December, 1852, before the payment. I may mistake the time.

Question. State whether the six thousand dollars of your claim included all the claim of Mr. Hartshorne or not?

Answer. It included all of his claim that I know anything about. I was licensed to trade on the St. Peter's river, between Little Six's village and the Little rapids.

Question. Did you recognize Mr. Hartshorne as a licensed trader?

Answer. I supposed that we were doing business under my license. I had an assignment of Hartshorne's interest. Here the witness was shown Senate document No. 29, part 2, pages 34 and 35, marked H., and says, that it is the same list he saw in the hands of Hugh Tyler, at Mendota.

Question. Where did you get your license?

Answer. Of agent Bruce.

ALEXANDER McLEOD. sworn and examined as a witness.

Question. Were you at Mendota when the "half-breeds" were paid by Hugh Tyler?

Answer. Yes.

Question. Did you receive any money in right of your wife and children?

Answer. I received two hundred and twelve dollars and fifty cents.

Question. In what kind of funds?

Answer. I received one hundred dollars in ten dollar bank bills, on the Merchants' Bank of New York, and the balance in gold.

Question. Who paid you this money?

Answer. Hugh Tyler paid me. Mr. Sibley and Mr. Dousman were there counting out the money, and Mr. Tyler handed me the money.

Question. What per cent. was retained out of your money?

Answer. Fifteen per cent.

Question. Was Governor Ramsey present?

Answer. No.

Question. Did you sign a receipt for your money?

Answer. I signed two papers, but did not read either of them?

Question. Did you sign a power of attorney to Hugh Tyler to draw your money? See a copy on pages 29 and 30 of Senate document No. 29, part 2.

Answer. I suppose I did. I signed two papers and did not read either of them. I never signed any other paper, at any other time, connected with this matter. I saw several half-breeds sign at the same time. Mr. Tyler asked me to sign both papers.

WILLIAM B. DODD, being sworn testified as follows.

Question. Were you at the treaty at Traverse des Sioux in July, 1851?

Answer. I was.

Question. Did you see the Indians sign that treaty?

Answer. I did not. I left previous to the signing.

Question. Do you know anything about what is called the "*Traders' Paper*?"

Answer. I know that there was such a paper drawn up the day I left there.

Question. Do you know anything of the signing of it?

Answer. I do not know anything about its signing. I saw a rough draught of it before the signing of the treaty.

Question. In whose hands did you see it?

Answer. I cannot say. It was passing around in the hands of different persons who were there.

Question. Was there any schedule attached to it at that time?

Answer. There was not, nor was it signed.

Question. Were you at the payment of the upper bands of Sioux last fall?

Answer. Yes.

Question. Did you hear the chiefs in open council direct Governor Ramsey how they wanted their money paid which was due them under the treaty?

Answer. Yes. I heard Red Iron, (a chief,) and Limping Devil, (a chief also,) as the representatives of a council held in one of their lodges up on the hill, a short distance from the pay ground, demand of Governor Ramsey the money to be paid to *themselves*. This demand was made in open council. Governor Ramsey gave them to understand that they had made a previous arrangement, *and that* he could not pay them the money, as they had previously disposed of it. That they had agreed to pay their debts. I think the chiefs then got up and went away. I do not think anything was said at that time about the Traders' Paper.

Question. Were you present at any other council?

Answer. I was present at another. The Indians came down, and I followed them to the governor's quarters. They had commenced talking before I got in, and I heard this language by an Indian chief. "If our debts are found to be honest, we are willing to pay them. There is a large amount brought against us, and we are anxious that the matter shall be examined into before the money is paid." The reply of the governor was, "I will consider your proposition." This is all I can now recollect.

Question. Were you in all the open councils?

Answer. I was in two between the chiefs and Governor Ramsey, and these were all that I know of being held.

Question. Were you present at a council where a protest was drawn up, remonstrating to the President of the United States against Governor Ramsey's paying their money to the traders? See this paper on Senate document No. 29, pages 2, 3, and 4, part *first*, executed in presence of Agent McLean.

Answer. I was. That is the protest, (looking at it in said document.) It was interpreted to the chiefs and headmen by A. J. Campbell and Duncan Campbell; both of said interpreters being sworn by me as a justice of the peace; and that is my certificate on the paper shown to me.

Question. Was there another paper drawn up there at the same time?

Answer. There was.

Here notice was given to Governor Ramsey to produce the paper prepared by the Indian chiefs, and sworn to be in his hands. The paper was produced by Governor Ramsey, and reads as follows:

TRAVERSE DES SIOUX, *December 2, 1852.*

To his Excellency Alexander Ramsey, superintendent of Indian affairs :

" We, the undersigned chiefs and headmen of the See-see-toan and Wah-pa-toan bands of the Sioux or Da-ko-ta nation of Indians, now assembled in open council, respectfully and urgently ask, on the part of ourselves and our bands, the payment of moneys due our said bands from the sale of our country to the United States by the treaty of Traverse des Sioux, July 23, 1851, in the following manner, to wit :

Forty-six thousand six hundred (\$46,600) dollars, or the amount contemplated as annuity fund by our different treaties to be distributed equally among our said bands.

Twenty thousand (20,000) dollars out of the sum of two hundred and seventy-five thousand dollars, as per stipulation of the first clause of the fourth article of said treaty, to be retained by the President of the United States to remove and subsist our said bands in such manner as may hereafter be determined.

Sixty thousand (\$60,000) dollars, to be equally divided among the half-breeds of our said nation.

The balance of the sum of two hundred and seventy-five thousand dollars, as stipulated in the said first clause of the fourth article of said treaty, to be retained by the President of the United States until all claims against our said bands shall have been examined and adjudicated; and we do hereby, on the part of ourselves and our said bands, authorize and request the following named persons to act as commissioners on our part, to audit, examine, and adjust all claims and demands against our said bands, to the present date, viz: Nathaniel McLean, Thomas S. Williamson, and Madison Sweetser; and after a full examination and adjustment of such claims, the President of the United States is requested and authorized to pay the same out of the balance, if there be any, to be paid over to the chiefs of our said bands; but should the amount of the claims so awarded exceed that sum, then an equal proportion to be paid on each of the said claims.

The undersigned are aware that there is a large amount at the present time justly due from our hands to the licensed traders and others for supplies heretofore furnished, and which their former poverty has prevented their paying, and they are now anxious that all such claims should be satisfactorily adjusted out of the above named funds; but they are unwilling that any claims shall be arbitrarily paid without being satisfied of their justice.

We are also informed that a portion of our traders claim the authority to control the above named fund under a certain paper, which it is pretended was signed by us at the time of the signing of the treaty of Traverse des Sioux, purporting to give them the control of a large portion of said fund, to the exclusion of other claimants equally meritorious; and the undersigned hereby declare that such paper, if any exist, was fraudulently procured, that we never signed any paper purporting to settle the claims of our creditors or dispose of any portion of our treaty fund, and that we will never consent to the arbitrary payment of any pretended claims against us until their justice has been satisfactorily established."

Question. Is this the paper to which you had reference?

Answer. I think this is the paper, but I still think it was signed. I am not certain that this is the paper. I saw them busy, and I thought they were signing it. Upon reflection I think that the paper which was signed was a paper to Mr. Sweetser, stating their indebtedness to him, what for, &c., which they requested their agent to pay. The foregoing copy contains the substance of the Indians' request of Governor Ramsey according to the best of my recollection.

Question. Was this paper the result of a council among the chiefs?

Answer. It is the result of their council. The paper was read by Major McLean, and interpreted by A. J. Campbell and Duncan Campbell.

Question. Did they (the chiefs) take that paper to Governor Ramsey?

Answer. I saw Red Iron take that paper and hand it to Governor Ramsey while he was in the act of getting into the sleigh, or was sitting in the sleigh, having just gotten into it. I cannot recollect which.

Question. Were you present when the Indians were paid their "*annuities*" last fall at Traverse des Sioux?

Answer. I was.

Question. How much money did each receive?

Answer. Twelve dollars and fifty cents each.

Question. Who paid the money to the Indians?

Answer. I will here state the facts. The Indians refused to receive their pay in any other manner than to receive the *whole* of it. They wanted the whole and not a part. They refused to sign any receipts unless they got their money, (meaning the two hundred and seventy-five thousand dollars.) An Indian by the name of O-tak-e-ta appeared as a chief of the "Orphans" band, was recognized as a chief, and received *annuity money* as such; a portion of his band was paid in the afternoon. The next day the payment commenced generally. Before this payment commenced, Governor Ramsey, Mr. Tyler, and Mr. Dousman were up stairs in the house of Mr. Huggins. They came down into the front room, and I asked Mr. Tyler when they were going to commence the payment. He answered that they did not know; that they were going to try an experiment, and I think he said, "*damn them, I think we will fetch them;*" that they had concluded to commence the payment, and if they could pay two or three, and get them to accept the money, that the rest, seeing them buy and have goods in their possession, would be likely to go in and receive their pay.

Governor Ramsey was sitting in the room. Mr. McKenzie was there; and I think that Mr. Bailey and Dr. Foster were there also. The payment was commenced by paying a part of O-tak-e-ta's band, or else they were Indians who were with him. They paid a few that afternoon, and on the next day they went on with the payment. Major McLean took the money out of the box, and Mr. Tyler paid it to the Indians. I saw Mr. Tyler go and bring money in and pay it to the Indians.

I wish it understood that when allusion is made to the Indians having disposed of their money, I allude to a paper called the "*Traders' Paper.*"

Question. See Senate document No. 29, part 2, and page 7, and

say how many chiefs there are on that receipt to Governor Ramsey for two hundred and fifty thousand dollars.

Answer. The two first are all I knew, at the time of the treaty, as being chiefs. O-tak-e-ta was the one of whom I spoke yesterday, as belonging to the "Orphans" band. I first heard of him as a chief about the time of the payment, last fall, at Traverse des Sioux. I think Wah-na-ta was paid as a chief at the payment. I do not know whose band he belongs to. I saw a paper purporting to be a commission to O-tak-e-ta as a chief.

CAPTAIN DODD, cross-examined by Governor Ramsey's counsel.

Question. Were you in the second council?

Answer. I was, but did not get there until they were partly through.

Question. Who was the interpreter at that council?

Answer. I think it was Mr. Farribault.

Question. What chiefs were present in that council?

Answer. I think the same three chiefs, and perhaps the Little Rapids chief.

Question. One word now about the "*protest*." At the time you took the acknowledgment of that protest, had you been commissioned as a justice of the peace?

Answer. I had been commissioned by Governor Ramsey, and had entered upon the duties of my office. I saw that protest handed to Governor Ramsey, as he was leaving Traverse des Sioux.

Question. Who interpreted it to him?

Answer. I think Campbell was there, but I do not now recollect.

Question. Was not the conversation there about provisions?

Answer. I did not hear anything of that kind. I was where I could hear ordinary conversation, but heard nothing of it, to my recollection.

Question. Who was present at the house of Mr. Huggins, where Mr. Tyler made the declaration testified to by you?

Answer. My recollection is that Tyler, Dousman, and, I think, Mr. McKenzie. I saw them go up stairs, and come down. Governor Ramsey and these men were boarding there, but I cannot say where they slept. There was another house where consultations could be held, and the house where they paid the Indians could have been used for councils. I think that they commenced paying that evening. I did not know that O-tak-e-ta had a band; but they commenced paying the men who were with him first.

Question. How long have you resided in this territory?

Answer. Nearly three years.

Question. Before leaving St. Louis, had you been on the frontiers of the country?

Answer. Yes, on Lake Superior.

Question. Had you ever resided among the Sioux Indians before coming here?

Answer. No. I stopped a while, a very short time, at "Stillwater." I have resided a while at St. Paul. I had no knowledge of the Sioux language before I came here. I had no knowledge of the chiefs before I came here. I had been among the upper Indians, from the 10th of

May, 1852, but this was not the first time I had met them. I tried to learn their language, and learned their names of things. The principal portion of my time has been spent, for a year, in exploring the country with Indian guides.

Question. You say that you know there was such a paper as the "Traders' Paper"—how did you know it?

Answer. I say I saw a rough draft of the so-called "Traders' Paper."

Question. You say that you heard Limping Devil and Red Iron demand this money to be paid into their own hands?

Answer. I did. I think A. J. Campbell was the interpreter for the Indians, and Mr. Farribault, also.

Question. Who were in the council?

Answer. Red Iron, Limping Devil, and E-yang-mo-nee.

Question. What time was this?

Answer. It was in the latter part of November, 1852.

Question. What white persons were there?

Answer. I think several. I think Mr. Sibley, Mr. Fillmore, Mr. Tyler, Mr. Alexander Huggins, and Mr. Holtsclaw, were present.

Question. In whose employment was Duncan Campbell?

Answer. Mr. Sweetser's employment.

Question. In whose employment was Mr. Shaffer?

Answer. Mr. Sweetser's.

Question. Where was this "*protest*" prepared?

Answer. I do not know where, or by whom. Red Iron wanted me to go to Mr. Sweetser and see that the paper was right. I found Major McLean there, and he asked me to swear the interpreter, and I did so. Major McLean read the protest and explained it, and I gave my official certificate. This was at Mr. Sweetser's store. Red Iron was there. We-ma-do-ta-hu-to-mo-ni, and Lean Bear, and some others, was there also.

Question by government commissioners. Do you say that the men named at Huggins's went up stairs with Governor Ramsey, and that they came down together?

Answer. They did; and I asked Tyler what was the result of their consultations. They had been talking about the payment before they went up, and Mr. Tyler replied as I have stated.

—

ALEXIS BAILLEY, sworn and examined as a witness.

Question. Were you at the treaty at Traverse des Sioux?

Answer. I was.

Question. Did you see a paper which was signed at the time of the signing of the treaty called the "*Traders' Paper*?"

Answer. I did.

Question. Who had that paper in possession?

Answer. Joseph R. Brown.

Question. Was this signing of the "Traders' Paper" going on in the presence of the commissioners, Governor Ramsey and Luke Lea?

Answer. Yes; it was along side of them, or within a few feet of them.

Question. See Senate document No. 29, page 22, second part, and say whether that is the *paper* you saw signed near to the commissioners at Traverse des Sioux?

Answer. This is substantially to the same effect.

Question. When that paper was signed was that schedule of creditors names and amounts attached to it?

Answer. No; or if it was, it must have been filled up after I had seen it.

Question. Did you see Mr. Williamson sign it as a witness?

Answer. My impression is that he signed it as a witness.

Question. How long after that paper was signed was it before that schedule was made out and attached to it?

Answer. The council adjourned between four and five o'clock, p. m. I was acting as commissary, and went to give out some provisions, and when I returned back, about eight o'clock, p. m., it was then filled up.

Question. Was it filled up in presence of the Indians in council or not?

Answer. I do not know. I was not there when it was filled up.

Question. In whose hands was it when you saw it after the schedule was attached to it?

Answer. In Mr. Dousman's and Mr. H. H. Sibley's. I being a party interested, I requested them not to act on the matter until I got back, as I wanted to have a vote in the appointment of the committee to adjudicate these claims against the Indians.

Question. Who were appointed to investigate these claims?

Answer. When I returned back at eight o'clock, p. m., I was told that the matter was settled, and that the adjudications had taken place, or had been made.

Question. Who composed that committee?

Answer. I understood from the men themselves that it was Louis Roberts, Martin McLeod, and Joseph R. Brown. Having then expressed my disapprobation of the course taken, I was called into a lodge, and there I saw a list, separate from the paper signed by the Indians, with the names of the traders and amounts allowed to each, as I now see them on Senate document No. 29, part 2, page 23.

Question. Are the committee the same persons who appear as *creditors* of the Indians on that schedule?

Answer. Yes; they were on the schedule.

Question. Were the trader's books, together with their bills of items, exhibited on the ground before that committee for adjudication?

Answer. Mine were not, nor none others, to my knowledge.

Question. Were the creditors sworn to their claims, before they were attached to the "Traders' Paper," signed by the Indians?

Answer. Not that I know of.

Question. By what rule did this committee profess to be governed?

Answer. I know of none.

Question. Was this Traders' Paper, which was signed by the Indians at the time of the signing of the treaty, explained to the chiefs in open council?

Answer. Not that I know of.

Question. Do you speak the Sioux language?

Answer. Very little ; but I understand more than I can speak.

Question. Were you near by when the Indians signed that "Traders' Paper?"

Answer. Yes.

Question. Were you at the payment "*last fall*" at Traverse des Sioux, which was made to the See-see-toan and Wah-pa-toan Sioux Indians?

Answer. I was.

Question. Did you hear the chiefs in open council direct Governor Ramsey how they wanted their "hand-money" (the two hundred and seventy-five thousand dollars) paid?

Answer. Yes; the chiefs directed that the said money should be paid into their own hands, to be afterwards paid by them as they thought best. Governor Ramsey said that this money had been laid aside for a specific purpose, and that he could not divert it. The Indians made no reply. There was then another council, wherein they asked to strike off a certain portion of the amount which had been laid aside for the traders, which they wished to be paid in accordance with a paper they presented to Governor Ramsey?

Question. Who presented this last list, distributing seventy thousand dollars to the traders?

Answer. It was presented by the son of a chief called "the Gun."

Question. At any other council did you hear the chiefs demand their money to be paid into their own hands?

Answer. Prior to the presenting of this last paper, they made several demands of Governor Ramsey to have their money paid to themselves; similar to the demand in the first council.

Question. What were Governor Ramsey's answers in each of these councils to these repeated demands of the Indians?

Answer. His answers were the same as before stated: that their "great father" expected them to pay their just debts. I do not recollect the reply of the Indians to this last remark. The last remark seemed generally to be a poser to the Indians.

Question. Did Governor Ramsey have the money (the two hundred and seventy-five thousand dollars) with him at Traverse des Sioux, at that time?

Answer. I do not know that he had that sum; but he had a sum of money, "*their annuity money*," which was paid out to the Indians?

Question. Please name the chiefs of the Wah-pa-toan and See-see-toan bands of upper Sioux Indians?

Answer. Mah-zah-shah, or Red Iron; Ish-ta-hum-ba, senior, or "Old Sleepy Eyes," and Ish-ta-hum-ba, junior, or "Young Sleepy Eyes;" E-tay-wah-ke-an, or Limping Devil; O-pee-en-dah, or Big Curley Head; Wah-min-da-ne-chah, or the Orphan; E-yang-mo-nee, Big Gun, or Running Walker; and Wah-nok-soon-ta, or the Little Rapids chief—making *eight* in all.

Question. Were all these recognized as chiefs at the treaty at Traverse des Sioux, in July, 1851?

Answer. I think they were.

Question. Was Wah-na-ta a party to the treaty of 1851?

Answer. I do not know. He was the son of a Yankton Sioux chief.

They have intermarried a good deal with the See-see-toan Sioux about Lake Traverse.

Question. How much did the See-see-toan and Wah-pa-toan Indians get of the two hundred and seventy-five thousand dollars, under the 4th article of the treaty of Traverse des Sioux of 23d July, 1851?

Answer. I do not know that they received any of it. I think I would have known from my knowledge of the facts if they had received any of it. There were forty thousand dollars set apart to the half-breeds, and twenty-five thousand dollars set apart for their removal and subsistence, the first year; and I understood that two hundred and ten thousand dollars was paid to the traders. The Indians did not set apart this two hundred and ten thousand dollars. I allude to the amount named in the schedule spoken of.

Question. Were you at the treaty of the 5th of August, 1851, at Mendota?

Answer. I was.

Question. Did you hear the chiefs of the lower bands (I mean the Med-a-wa-kan-toan bands) direct Governor Ramsey how they wanted their "haud money" paid, at any open council at the St. Peter's agency, last fall, at the payment?

Answer. Yes. They asked Governor Ramsey, in my presence, in open council, not only for the "hand money," but for all the money coming to them under the treaty of the 5th of August, 1851, the traders' money inclusive. The governor replied pretty much as he did before: "That a certain sum had been set apart for specific purposes, and he could not divert it; that the 'great father' expected them to pay their just debts."

Question. Were there some of the chiefs for paying their debts and some not?

Answer. They were all for paying their debts; but they were for having their money first paid into their own hands, and then to pay their debts themselves as they thought just and proper.

Question. How much did the Med-a-wa-kan-toan bands receive of the one hundred and ten thousand dollars due them under the 4th article of the treaty of the 5th of August, 1851?

Answer. Twenty thousand dollars was set apart for their removal and subsistence the first year; twenty thousand dollars, at the instigation of some influential men, was set apart to be given to the chiefs, to be distributed *by them* to their half-breeds as they thought proper; and seventy thousand dollars was left to be paid to the traders.

Question. What was that twenty thousand dollars given to the chiefs for? If you know what motive was in it we want to know it.

Answer. It was for the purpose of inducing them to sign the receipt to Governor Ramsey for the ninety thousand dollars. Governor Ramsey got the receipt.

Question. Look at pages 17 and 18 Senate document No. 29, part 2, and see the receipt of the chiefs to Governor Ramsey for ninety thousand dollars, and say if that is the receipt to which you allude in your former answer?

Answer. It is.

Question. Did Governor Ramsey pay you as one of the traders, or did some one else pay it for him?

Answer. Some one else did; Hugh Tyler paid me.

Question. Did you give Hugh Tyler a power of attorney to draw your money from Governor Ramsey?

Answer. Yes.

Question. Why did you give him that power of attorney?

Answer. My reason was that the payment to the traders had been so protracted I got tired waiting.

Question. If you know, say why did not Governor Ramsey pay you the money himself?

Answer. I do not know the reason.

Question. Who asked you to sign that power of attorney to Hugh Tyler?

Answer. Mr. H. H. Sibley and Mr. H. L. Dousman.

Question. Were you required to submit to the discount on the amount due to you from the Indians, by Hugh Tyler, previous to the payment of the money?

Answer. We had to submit to it. It was a contract made with him, and of course we had to submit.

Question. Would you have received your money without doing so, if you could have done so?

Answer. Certainly I would not have paid it if I could have avoided it.

Question. What amount of discount was taken out of your claim?

Answer. Twelve and a half per cent.

Question. What was to be done with that twelve and a half per cent.?

Answer. It was to be paid to Hugh Tyler.

Question. Do you know the reason why Hugh Tyler was brought in to receive this per cent.?

Answer. I do not know.

Question. What was your understanding about it?

Answer. I was informed by those who were associated with me that two and a half per cent. from the traders was to go to Hugh Tyler, to assist in carrying out the views of that treaty in Washington. After his arrival here it was intimated to me that this sum would not cover the expenses he had been at, and it was proposed to add eight per cent., making ten and a half per cent. As obstacles were increasing in the way an additional two per cent. was asked for, making twelve and a half per cent. in all. These obstacles were, as I was led to understand, that certain persons were trying to induce the Indians not to pay their debts. A part of it was to be used as *secret service* money. It was to be used in paying persons who were throwing obstacles in the way to induce them to withdraw their opposition from the payment to the traders.

Question. We wish to know something of the payment to Hugh Tyler under the treaty of Traverse des Sioux. How much did you have to pay out of your claim against the See-see-toan and Wab-pa-toan Indians to Hugh Tyler?

Answer. Fifteen per cent.

Question. Who paid you *that* claim?

Answer. Hugh Tyler paid me the small portion allowed me, and took the fifteen per cent. on that.

Question. In what kind of funds were these claims paid to you in?

Answer. They were paid in drafts and paper money.

Question. What banks were the drafts upon?

Answer. A bank in New York. The drafts were worth a premium here at the time.

Question. Who drew the drafts?

Answer. Governor Ramsey drew them payable to Hugh Tyler or order, and they were endorsed in blank by Hugh Tyler.

Question. How much paper money were you paid by Hugh Tyler on your claim?

Answer. About two thousand dollars. The paper money was my choice. I afterwards called on Governor Ramsey for some gold, and he very cheerfully paid me one thousand dollars in gold.

Question. Did the half-breeds have to submit also to the discount of fifteen per cent. to Hugh Tyler?

Answer. I think it was fifteen per cent. that they had to pay him.

Question. How many of them did you see paid?

Answer. I saw, perhaps, two-thirds of them paid.

Question. In what kind of funds were they paid?

Answer. In paper money, by Hugh Tyler.

Question. Do you know whether the chiefs of the Med-a-wa-kan-toan bands got all of the twenty thousand dollars you mentioned, and if so, was it afterwards paid or distributed by the chiefs to their half-breeds?

Answer. Some of them got their money. I know of three bands who distributed it to their half-breeds and their bands. "Little Six" was one, "Little Crow" another, and Good Road. These were the ones alluded to.

Question. Who paid this twenty thousand dollars to the chiefs?

Answer. I was not present when that was paid.

Question. Do you know Hugh Tyler?

Answer. I do. I had a slight acquaintance with him.

Question. How long have you resided in the Indian country, and on the Mississippi river at and above Prairie Du Chien?

Answer. About thirty-three years.

Question. Is Hugh Tyler considered a person of influence with the Indians?

Answer. I think not. I suppose he has no influence whatever with the Indians.

Question. Had Hugh Tyler ever resided in this country before the treaties of 1851 and the payments under them?

Answer. No; but I had seen him here at St. Paul once before. I considered him a visitor once, before the treaty of 1851.

Question. From your knowledge of Hugh Tyler's capacity, would you have regarded him as a person qualified to exercise a favorable influence in procuring the amendments that were made to the treaty by the Senate of the United States to be ratified at Washington city?

Answer. Yes, he could.

Question. How, and in what way?

Answer. By his business qualifications and capacity, and his knowledge of government affairs in Washington. This is my opinion.

Question. Did you know of any necessity for the half-breeds paying this per cent. to Hugh Tyler?

Answer. No further than what existed also in regard to the traders' claims.

Question. Had not the treaty been ratified with the amendments when they were paid?

Answer. It had been; and it had been ratified also when the traders were paid.

Question. Was it the interest of the traders to have the Senate amendments made to the treaty to buy the "reserve" also?

Answer. I can only answer for myself, it was not my desire. There was more indebtedness from the Indians to the traders than two hundred and seventy-five thousand dollars would pay; but that was enough to pay what the Indians and traders had provided for paying—*but not in any open council.* This was before the treaty was signed. It was the impression of the traders that unless the treaty was confirmed they would be losers.

Question. Were you present when the Indians of the upper bands (See-see-toan and Wah-pa-toan) signed the receipt to Governor Ramsey for two hundred and fifty thousand dollars?

Answer. I was not.

Question. Who paid you the amount of your debt (allowed) under the treaty at Traverse des Sioux?

Answer. Hugh Tyler.

Question. In what kind of funds were you paid?

Answer. I received about two thousand dollars in bank paper and the balance in drafts on a bank in New York; I think the Merchants' bank of New York?

Question. What per cent. did you have to pay on that claim to Hugh Tyler?

Answer. Fifteen per cent?

Question. Why was a larger per cent. charged under this Traverse des Sioux treaty?

Answer. I suppose it was because there was more expense, and I saw about two-thirds of the parties named in the schedule attached to the 'Traders' Paper, before spoken of, paid out of this two hundred and seventy-five thousand dollars by Hugh Tyler, and they all paid the fifteen per cent. also. Martin McLeod refused to entertain the proposition to pay fifteen per cent. for three or four days, but afterwards came into the arrangement. He refused at first to agree to it, but he was not paid until after he came into it. Joseph Laframbois and Alexander Farribault also refused to pay it.

Question. Were there any *supposed* creditors' claims on that traders' schedule which were not just?

Answer. I say that some claims on that list were very excessive, others unjust; and some who did not get enough, or their just dues.

Question. Of the "traders' committee" who made out the list of

debts to be paid to the traders, were there any who could not *read* or *write*?

Answer. There was Louis Roberts who cannot read or write?

Question. Did you refuse in the first place to pay the fifteen per cent?

Answer. No. But thought it was an *abominable charge*.

Question. Did you ever know of any person, out of all upon the traders' list or schedule, who got their pay, unless they did submit to this fifteen per cent. deduction by Hugh Tyler?

Answer. I do not know of any.

Question. Were not the claimants told, or given to understand, that unless they submitted to the payment of fifteen per cent. that the money would be paid directly to the Indians?

Answer. I did not hear Governor Ramsey or Hugh Tyler say so; but it was said in the presence of Hugh Tyler.

Question. Did you see Governor Ramsey present while the payment to the traders was going on by Hugh Tyler?

Answer. I saw him there once or twice a short time?

Question. Did you enter into any agreement to pay this fifteen per cent. before you demanded your pay?

Answer. I did not before I asked for the payment of the money.

Question. Do you know what was done with the fifteen per cent. which was paid to Hugh Tyler?

Answer. It was used in the same way I have stated, in which the twelve and a half per cent. was used.

Question. Do you know what part of it Hugh Tyler was to have for his services?

Answer. I do not.

Question. Do you know who this secret service fund was paid to.

Answer. I do not know, only from hearsay.

Question. Do you know, from persons who paid this fifteen per cent. and twelve and a half per cent., whether this fund thus created is on deposit in any bank?

Answer. From information from some of the persons who paid this per cent., I learn that it is deposited in some bank in Pennsylvania, to the amount of forty odd thousand dollars.

Question. Where does Mr. Tyler reside when at home?

Answer. I do not know. He told me he resided in *Pennsylvania*.

Question. What proportion of the money paid by Hugh Tyler to the traders and half-breeds was paid in bank bills and drafts on banks?

Answer. The forty thousand dollars, deducting the per centage spoken of, was paid in bank bills and drafts; the larger amount in bank bills; perhaps five thousand dollars in drafts. This latter amount would be the outside of what was paid in drafts.

Question. What time was it when you signed the power of attorney to Hugh Tyler?

Answer. About the latter part of November or first of December, 1852, after the Indians had been assembled at Traverse des Sioux and paid their *annuities* in part, and after we had gotten down to Mendota. I did not see all sign it, but it is my impression that they generally all signed it at Mendota, and at Mr. H. H. Sibley's office. I saw one or two sign it in his dwelling house. At this time, Governor Ramsey had

returned from Washington with the Sioux money, as he said, to be paid to the chiefs in open council.

Question. Had you signed any paper before that, constituting Hugh Tyler your attorney in this Sioux matter?

Answer. I had not.

Question. Were you at Traverse des Sioux when the upper or See-see-toan and Wah-pa-toan band of Sioux Indians were being assembled for the fall payment under the treaty of July, 1851?

Answer. Yes.

Question. Was there any difficulty in getting the chiefs to sign the receipt for the "hand money?"

Answer. There was difficulty, but the nature of that difficulty I do not know.

Question. Were you ever in consultation with Governor Ramsey, Mr. Tyler, Mr. Dousman, and others, about the payment at Traverse des Sioux?

Answer. I was in consultation with those men several times there; but the manner of this payment was not discussed in my presence.

Question. Was Governor Ramsey present at the half-breed payment?

Answer. I believe not. I do not recollect of seeing him there at that payment. I was there myself nearly all the time.

Question. Give us the order of time, if you can, at which the several amounts of per centage were increased and added, as you have mentioned?

Answer. Before Governor Ramsey went on to Washington for the money, Hugh Tyler had been promised two and a half per cent. After Tyler and Governor Ramsey returned from Washington, eight per cent. more was demanded; and three weeks or more after that, two per cent. more was demanded—making twelve and a half per cent. in all on the Med-a-wa-kan-toan fund. There was ten per cent. paid on the Wah-pa-coo-ta fund.

Question. Now, Mr. Bailey, did the Wah-pa-coo-ta band ever oppose their debts being paid to their traders?

Answer. No, never.

Question. Did not the Wah-pa-coo-ta band, from the very first, acknowledge their indebtedness to their traders, and desire it to be paid both in council and out of council?

Answer. Yes.

Question. Do they not yet agree to it?

Answer. Yes.

Question. Now, tell us why it was necessary for the traders to pay Hugh Tyler ten per cent. to get their money from these Indians?

Answer. I cannot tell why. I know I had to pay nine hundred dollars to get the nine thousand dollars that was due to me. No part of this per cent. was used, or necessary to be used, to my knowledge, to induce the Wah-pa-coo-ta chiefs to do anything. They always were willing to pay, and never gave any trouble to anybody.

Question. Who paid that nine thousand dollars to you?

Answer. I gave Mr. H. H. Sibley an order to Governor Ramsey for my money, and he (Mr. Sibley) passed it to my credit, after deducting

ten per cent. from the gross amount. I do not know who got this ten per cent., but my impression is that Hugh Tyler got it.

Question. How long were the Indians kept at Traverse des Sioux, after Governor Ramsey arrived there with the money, before their *annuities* were paid to them?

Answer. About two weeks. I do not know that they were kept there by him.

Question. Were they paid their *annuities* until after the receipts were executed for the "hand money?"

Answer. I know of no receipt being given personally; but I think they were given first. No receipts were given in open council. I was watching for that; for I knew when the receipts were signed, that we should leave immediately.

Question. Was this "*annuity* money" of the Med-a-wa-kan-toan bands paid to them until after Governor Ramsey had procured the receipts from the chiefs for the "hand-money," under the 4th article of the treaty of 1851?

Answer. I think the receipts were first obtained, and the "*annuity* money" paid afterwards.

Question. Were there any Indians imprisoned at Fort Snelling, for murder, about the time of this payment, and signing of receipts?

Answer. There were two Indians imprisoned there for murder, related to the Little Crow's band and the Lake Calhoun band of Sioux; and they were released a little before, or a little after this payment of the "*annuity* money." The Indians were very anxious to have them released.

Question. Do you consider the schedule of amounts as allowed and made out by the "traders' committee," a fair and just distribution of the money?

Answer. I answer, *it was not a fair distribution.*

Question. Did you hear anything at Traverse des Sioux, from Governor Ramsey or any person in his presence, about the manner in which they proposed to commence the annuity payments; and what object was to be gained by it, if any?

Answer. One day, in Mr. Huggins's house, Mr. Sibley or Mr. Dousman (Governor Ramsey being present) said that they were going to commence the payment to those who were willing to receive it, in order to induce the others to come in and receive the money also, the Indians having refused to receive it; the object was, to induce those who had refused to receive it, to come in with the rest.

Question. Were all whose names were on the "traders' schedule," really *licensed* traders, or representatives of licensed traders, with the See-see-toan and Wah-pa-toan bands, or half-breeds of those bands?

Answer. There are several who were not traders with the See-see-toan and Wah-pa-toan band, nor are all half-breeds on that list. S. R. Riggs, T. S. Williamson, and W. H. Forbes, were not licensed traders, nor do I know that Mr. Sibley was a licensed trader of those Indians.

Question. Do you know the half-breeds of the See-see-toans and Wah-pa-toans, and Med-a-wa-kan-toan bands?

Answer. I do.

Question. Do you consider the distribution as made to them, fair and just?

Answer. I do not. Some of the half-breeds were excluded entirely.

Question. Were any names added to the "traders' schedule" after it came from the hands of the committee, and if so, what names, and by whom were they added?

Answer. The name of H. L. Dousman was not on it, when I saw the list after the "traders' committee" had reported. When I got to Mendota, I discovered his name also on it. He is not a partner of mine, nor never was a partner of mine. I think that Dousman's name was added in his own hand writing.

ALEXIS BAILLEY, cross-examined by Governor Ramsey's council.

Question. Was Governor Ramsey present when any distribution was made by the traders of their debts, or at any of the consultations among the traders?

Answer. I was not present myself, and cannot say whether Governor Ramsey was present or not on such occasions.

Question. Was Governor Ramsey present at the time this "traders' committee" made the distribution of the two hundred and ten thousand dollars?

Answer. I do not know, I was not there myself.

Question. Were you at the council when the upper bands of Indians made a distribution to the half-breeds?

Answer. There was no council, but some few of them were carrying out the views of a few of their friends, whom they wished to favor, by giving them a share of the forty thousand dollars.

Question. What amount was *there* set apart for the half-breeds, and by whom?

Answer. I do not know. It was a distribution of a portion of the forty thousand dollars, which was taken out of the two hundred and seventy-five thousand dollars previously. But I understood that the Indians had nothing to do with setting it aside in the first instance.

Question. Were you present when this forty thousand dollars was set aside for the half-breeds?

Answer. I was not.

Question. Were you present when the twenty thousand dollars was set aside for the removal and subsistence of the Med-a-wa-kan-ton bands?

Answer. I was present when the chiefs requested the commissioners to lay aside that sum of money; or rather when the commissioners read to them this fact, that twenty thousand dollars had been set aside, and the chiefs and headmen assented to it.

Question. Were you present when the receipt was given for the one hundred and ten thousand dollars at Mendota?

Answer. I was not.

Question. Was Governor Ramsey present at any conversation you had with Hugh Tyler, in reference to any of these powers of attorney of which you have spoken?

Answer. I never had any conversation with Mr. Tyler on that subject; my talk was all with Mr. Sibley.

Question. Was Governor Ramsey present when you signed the power or powers of attorney to Hugh Tyler?

Answer. No.

Question. Was Governor Ramsey present when you received your money under these powers of attorney?

Answer. No.

Question. Was the two hundred and ten thousand dollars enough to pay the debts of the Wah-pa-toan and See-see-toan bands of Sioux?

Answer. It was not.

Question. Was the aggregate indebtedness of the Med-a-wa-kan-toan bands greater than seventy thousand dollars?

Answer. Yes.

Question. Were you present at the council subsequent to the treaty of the 5th of August, 1851, when the chiefs acknowledged certain indebtedness to individual traders.

Answer. I was; but it was not in the presence of the commissioners. But they said before the commissioners, that they wanted ninety thousand dollars laid aside to pay their just obligations. Then, at a council with the traders, they acknowledged an indebtedness to them of one hundred and forty-nine thousand dollars, and at a subsequent council of Indians and traders they acknowledged an indebtedness of one hundred and nineteen thousand dollars; but none of these were agreed to, as some parties were dissatisfied with the amounts allowed them.

Question. Was this disagreement on the part of the traders?

Answer. It *was* on the part of the traders.

Question. If this money had been paid to the Indians at the payment would they have paid their traders?

Answer. No, they would not.

Question. Would they have set aside anything for their removal and subsistence?

Answer. I do not think they would.

Question. Would they have paid their half-breeds?

Answer. They might have given a part of it to their half-breeds.

Question. From your knowledge of the Indian character, when they expect to gain, what credit would you attach to their evidence?

Answer. I do not think much of it when they expect gain; but when left to themselves they are equal to white men. But it is almost impossible to keep them from such influences.

Question. What were Mr. Sweetser's comments on the arrest and imprisonment of Mah-zah-shah, or Red Iron, at Traverse des Sioux?

Answer. He expressed a good deal of feeling, and spoke of it as an act of injustice. But he said that he did not blame Governor Ramsey or the government officers.

Re-examined by the government commissioners.

Question. You have spoken of the Indians having acknowledged to owe the traders at one time, one hundred and forty-nine thousand dollars, *and at another time*, one hundred and nineteen thousand dollars.

Now say, whether from your knowledge of the Indians, are they capable of settling their accounts for such large amounts?

Answer. They are not capable of looking into these matters where large amounts are involved.

Question. Did the Indians express the desire to have some white person to look into their accounts and see what was due to the traders?

Answer. They did express such a desire.

Question. Were your accounts, after you had sworn to them, submitted by Governor Ramsey to the chiefs and headmen of the bands from whom the funds were taken, or by Major McLean, their agent?

Answer. I do not know that they were so submitted by any one.

Question. Were any payments made in paper money on any of the Pennsylvania banks?

Answer. I saw some paid in Pennsylvania bank notes, and I think on the Bank of Middleton. But they were mostly made in New York bank notes.

Question. Why did you sign the order in favor of H. H. Sibley to Governor Ramsey to draw your money due from the Wah-pa-koo-ta band instead of drawing it yourself?

Answer. I signed it because Mr. Sibley informed me that there was some apprehensions that an order might be and was apprehended (through Mr. Sweetser) from the President of the United States to stop the payment. I at first refused, until this information was given, and so did some others; and he further said that we might as well get the ninety thousand dollars and have the use of it.

Cross-examined again by Governor Ramsey's counsel.

Question. Do you know from your own knowledge that any part of that *secret service money* was to go to Governor Ramsey?

Answer. I do not.

Question. Did Governor Ramsey offer the twenty thousand dollars to the chiefs to sign that receipt for ninety thousand dollars?

Answer. I do not know that he did?

Question. Do you know how Governor Ramsey came to liberate the Indian prisoners confined for murder at Fort Snelling?

Answer. The chiefs in open council asked Governor Ramsey to liberate them, and Governor Ramsey replied that he would, provided they acted properly in carrying out the treaty.

Question. Were they related to the chiefs of the lower bands?

Answer. They were related to Little Crow's and the Lake Calhoun bands. They were released, as I understood, by Governor Ramsey, about the payment, a little before or after it.

WAH-COO-TA, The Shooter, or he that shoots arrows, a chief of one of the Med-a-wah-kan-toan bands of *lower* Sioux Indians, was here sworn and examined as a witness.

William Henry Forbes, sworn as interpreter.

Question. Did you sign the treaty of the 5th of August, 1851, at Mendota?

= Answer. Yes.

Question. Did the Med-a-wa-kan-toan chiefs direct Governor Ramsey, at the payment last fall in open council, how they wanted their money paid?

Answer. I will tell you. There was a good deal of talk; we were forced to sign, for fear of starvation; we were threatened, and we signed a paper in Mr. Steele's house.

Question. Did the chiefs, before the payment last fall, hold a council?

Answer. I do not know of any council being held last fall before the payment.

Question. Were you in council last fall with Governor Ramsey?

Answer. I was; at the time there was so much noise about the money.

Question. What did the chiefs tell Governor Ramsey at that council?

Answer. There was a great deal of talk. I was opposed to paying the debts.

Question. What did you want done with the money?

Answer. All the young men of my band wanted the money in their own hands, and I agreed with them; and then to pay it out afterwards, here and there, as we thought right and proper.

Question. How did Wa-ba-shaw want the money paid?

Answer. He gave in first. I staid there till late—near midnight.

Question. How much money was coming to the Med-a-wa-kan-toan bands?

Answer. I do not know.

Question. Did Wa-ba-shaw ask Governor Ramsey for the money?

Answer. I did not hear him ask for it.

Question. Did you sign the receipt to Governor Ramsey for ninety thousand dollars?

Answer. Wa-ba-shaw signed first, and then I signed it.

Question. Was anything given to you to sign it?

Answer. No; no one bought us.

Question. What made you sign it?

Answer. We could not succeed in getting our money otherwise; and after Wa-ba-shaw signed it, I signed it also.

Question. Did Governor Ramsey then pay you your money?

Answer. After that some money was paid to us.

Question. How much was paid to you?

Answer. Some got nineteen dollars and some got more.

Question. Did you not get two thousand eight hundred and fifty-seven dollars from Governor Ramsey?

Answer. Wa-ba-shaw got three thousand dollars, and I got three thousand dollars.

Question. Who gave that to you?

Answer. Governor Ramsey.

Question. Did you take the money home with you?

Answer. No.

Question. Who got it?

Answer. My nephew, Jack Frazier.

Question. Did you give it to him?

Answer. I did not.

Question. Who did give it to him?

Answer. Mr. Steele, Jack Frazier, and Governor Ramsey said that I had better leave it until next winter with Mr. Steele.

Question. Have you ever received that money yet?

Answer. I have never gotten it yet.

Question. Have you ever asked for it since that time?

Answer. I have asked for it twice, and they have not given it to me.

Question. Who did you ask for it?

Answer. Mr. Steele.

Question. What did Mr. Steele say to you about it?

Answer. He said he would give it to me after a while.

Question. Did any person get Wa-ba-shaw's money?

Answer. Yes; the same person got both.

Question. Did the three thousand dollars ever come into your own hands?

Answer. It was placed on the table by Governor Ramsey. He came in with two sacks of money and laid them on the table, and Mr. Steele took them. I never touched it. I saw it, but never touched it.

Question. Was the money counted?

Answer. No.

Question. Were the two sacks of money for you and Wa-ba-shaw?

Answer. Yes; a sack for each.

Question. Was Wa-ba-shaw with you when you demanded this money from Mr. Steele?

Answer. Yes; twice last winter.

Question. Did the other chiefs get their money?

Answer. I heard so.

Question. Were there any prisoners confined at Fort Snelling about the time of this payment last fall?

Answer. Yes.

Question. Did they get out of prison?

Answer. Yes; it was because we signed the paper that they came out.

Question. Did Governor Ramsey tell you anything about turning them out?

Answer. Governor Ramsey told us that if we did not pay the money over these young Indians should remain there in prison.

Question. Who did the governor want you to pay the money to?

Answer. To pay our debts with the money was what he wanted.

Question. How did you and Wa-ba-shaw come to get this three thousand dollars a piece?

Answer. It was given to us.

Question. What did Governor Ramsey give you this money for?

Answer. I wonder who would give it to us for nothing. It was for our lands.

Question. How much of the one hundred and ten thousand dollars did you get?

Answer. I do not know.

Question. Did Governor Ramsey tell you that he had the money: and if so, did your chiefs then tell him how to pay it?

Answer. I was at but one council, and I do not know.

Question. How much did you receive of the "annuity money?"

Answer. We received twenty dollars each.

WAH-COO-TA cross-examined by Governor Ramsey's counsel.

Question. How old are you?

Answer. I am about sixty years of age.

Question. How much land did you sell to the whites?

Answer. We ceded from the St. Croix a good distance up.

Question. How much money were you to receive for it?

Answer. I do not well know, nor how much we draw interest upon exactly.

Question. How much money was to be paid of the "hand money?"

Answer. I do not recollect.

Question. How much for school purposes?

Answer. I knew it well once, but I have forgotten that also.

Question. Do you know how much was set aside for agricultural purposes?

Answer. The farmers were to receive six hundred dollars a year; but I do not recollect.

Question. How long are your "annuities" to run?

Answer. For fifty years.

Question. Did you sign a receipt when you got the three thousand dollars?

Answer. I signed the receipt first.

Question. How long before you got the money did you sign the receipt?

Answer. The same day.

Question. Where was that council held you have spoken of?

Answer. In Mr. Steele's dwelling house.

Question. Who was present when Governor Ramsey paid you the three thousand dollars?

Answer. Governor Ramsey, Samuel Finley, his wife, and Mr. Steele, that was all.

Question. Was Antoine Finley there?

Answer. I did not see him. He was sick and laying down.

Question. Was not Mr. Rock there?

Answer. Yes; I forgot, Jack Frazier was there also.

Question. Who was present when you signed the receipt?

Answer. The persons I have named were all.

Question. Did not Governor Ramsey lay one bag of money down to you, and one to Wabashaw, and say this is for you?

Answer. Yes. He said so. I told you so on yesterday.

Question. Who was present, and where was the council held you spoke of?

Answer. The council was held at Mr. Steele's house.

Question. Who was present when Governor Ramsey said he would keep the prisoners there all winter if they did not sign the receipt?

Answer. I did not hear Governor Ramsey say so; but I heard the young men say that Governor Ramsey said so. I was mistaken yesterday about it. I was a good deal confused.

Question. Has any one told you that you were going to get back your money that was paid to the traders?

Answer. I have not heard any body say so.

TAH-O-AH-TA-DOO-TAH, or Little Crow, a chief of one of the Med-a-wa-kan-toan bands of *lower* Sioux Indians, was here sworn and examined as a witness. William Henry Forbes sworn as interpreter.

Question. Did your chiefs in open council ask Governor Ramsey for your money last fall at the agency?

Answer. Yes. Wa-ba-shaw asked him for it.

Question. Was Wa-ba-shaw authorized to speak for the ~~seven~~ Med-a-wa-kan-toan bands of Sioux Indians?

Answer. We authorized him to speak for the ~~seven~~ bands.

Question. What did Governor Ramsey say in reply to Wa-ba-shaw's demand for the money?

Answer. The governor said "you must pay your debts." But Wa-ba-shaw would not allow it. Wa-ba-shaw asked to have all the money paid over into our own hands.

Question. What did the chiefs want to do with the money, if it had been paid over into your own hands?

Answer. We would have taken a small portion and paid our debts, and some to a trader to enable him to procure goods, so that we could always have him with us—one who would not abandon us.

Question. Did Governor Ramsey pay you the one hundred and ten thousand dollars due the Med-a-wa-kan-toan bands under the treaty of 1851?

Answer. Ninety thousand dollars we know of, but the other twenty thousand dollars we know nothing of.

Question. Did he pay the ninety thousand dollars to the traders?

Answer. Seventy thousand dollars were paid to the traders.

Question. What was done with the twenty thousand dollars?

Answer. It was for our removal and subsistence.

Question. What went with the twenty thousand dollars, the difference between the ninety thousand and seventy thousand dollars?

Answer. It was divided among the chiefs, in bags; I got one.

Question. How much did you get?

Answer. I got two thousand eight hundred and fifty-seven dollars.

Question. What did Governor Ramsey give the chiefs that twenty thousand dollars for?

Answer. We asked him for it, and he gave it to us.

Question. What did you do for him for it?

Answer. We did not do anything for it.

Question. Did you not sign a receipt for it?

Answer. We did.

Question. Did you sign more than one receipt?

Answer. I signed one then, and another when we got our annuity money afterwards.

Question. Did you sign a receipt for ninety thousand dollars to Governor Ramsey?

Answer. Wa-ba-shaw and Wah-coo-ta signed it at night, and I signed it the next day.

Question. Why did you sign the receipt to Governor Ramsey for the ninety thousand dollars, if you did not want him to pay your traders?

Answer. Wa-ba-shaw and Wah-coo-ta signed it first, and although we wanted to have it otherwise, we signed it.

Question. Did you sign the receipt for the two thousand eight hundred and fifty-seven dollars at that time?

Answer. We signed some receipt afterwards. I do not know which we signed first. I think we signed the ninety thousand dollar receipt first. Two days after the first, we signed at Mr. Sibley's house for the ninety thousand dollars, and the other at the agency.

Question. Did you sign the receipts in open council?

Answer. Wa-ba-shaw and Wah-coo-ta signed *at night*, and we signed it in open council the next day. The room was full, and Governor Ramsey was present.

Question. Did you refuse to sign this ninety thousand dollar receipt at first?

Answer. We would not sign it at first.

Question. Did any one tell you that they would give you that twenty thousand dollars if you would sign that ninety thousand dollar receipt?

Answer. No answer.

Question. Did the chiefs in open council direct Governor Ramsey to pay this seventy thousand dollars to the traders?

Answer. No; they did not. They did not agree to it. Wa-ba-shaw and Wah-coo-ta fixed it. The others knew nothing of it.

Question. Did you have anything to do with setting apart this seventy thousand dollars for the traders?

Answer. Wa-ba-shaw and Wah-coo-ta fixed it. There were a great many Med-a-wa-kan-toan Indians who knew nothing about it.

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Here WA-BA-SHAW was recalled, and being sworn, testified as follows. William Henry Forbes interpreter.

Question. How was that ninety thousand dollar receipt procured?

Answer. Governor Ramsey spent nearly all night in trying to get us to sign that receipt for the ninety thousand dollars. We signed it late at night at Mr. Steele's house.

Question. What did Governor Ramsey say to you at Mr. Steele's when he wanted you to sign the receipt?

Answer. Governor Ramsey told and advised me to pay seventy thousand dollars towards our debts, and I refused. I told him when we made the treaty of 1837, that we then paid all our debts, and that we did not want to pay any more. I proposed that he should pay forty thousand dollars to the traders, and thirty thousand dollars to us, but he refused to do that. I could not succeed in what we asked for, and all we got at last was the twenty thousand dollars; and I could not succeed otherwise, and our half-breeds told us to sign the receipt, and we signed it.

TAH-O-TA-AH-DOO-TA, or "Little Crow," recalled. **William Henry Forbes** interpreter.

Question. How long were the chiefs kept at the agency last fall before the payment?

Answer. A good many days. We were there a month or more—perhaps two months.

Question. Were the Indians paid their "annuity money" before or after you signed the receipt for the ninety thousand dollars?

Answer. We signed the receipt first.

Question. How long after you signed the receipt for the ninety thousand dollars was it before you were paid your annuities?

Answer. Two days afterwards.

Question. What was the reason the Indians were not paid their "annuity money" before you signed this receipt for ninety thousand dollars?

Answer. We tried hard to get it before. That man **Wa-ba-shaw** tried hard to get it before, but we could not succeed before we signed the receipt.

Question. Did Governor Ramsey refuse to pay the Indians their "annuity money" until they signed the receipt for the ninety thousand dollars; or was he present when there were conversations by others to that effect?

Answer. Yes; the governor refused, and said we should not have a cent until we signed that receipt. There were a good many traders, half-breeds, and others present when he said so.

Question. After Governor Ramsey refused to pay you your "annuity money," did he, or any other person, in his presence, offer you any inducement to sign that receipt for the ninety thousand dollars?

Answer. Mr. Sibley, Mr. Alexander Farribault, and many others, asked us to sign the receipt. Mr. Sibley offered us seventy horses, and double-barrelled guns and pistols to a good many of the band; but we never received them; and Governor Ramsey was present.

Question. Was this talk to you in the **Da-ko-ta** language?

Answer. Yes; it was said to me in the **Da-ko-ta** language through an interpreter. I do not understand English.

Question. Was anything said about the signing this ninety thousand dollars receipt in connexion with the release of some prisoners at **Fort Snelling**?

Answer. Not in the presence of Governor Ramsey.

Question. Were these prisoners in the fort for crimes committed by them?

Answer. Yes; there were five men confined for killing **Chippewa** Indians at that time.

Question. Were any of them related to the chiefs?

Answer. There was one my cousin, one the son of the chief **Wc-chonck-pee**, or the Star, and one the son of "Bad Hail," a first soldier. Governor Ramsey said that their great father at Washington told him to retain them in the "guard house" until they (the chiefs) signed the paper; and to retain their money and not pay it to them until they signed it. If it had not been for these things we would not have signed the paper all the winter.

Question. When you signed the paper did Governor Ramsey release these prisoners ?

Answer. Yes ; after we signed the paper we went over for them, and they were let out.

TAH-O-AH-TA-DOO-TAH, or Little Crow, cross-examined by Governor Ramsey's counsel.

Question. Who was present when Governor Ramsey said he would not pay their "annuities" unless they signed the receipt ?

Answer. All the Indians were present, and a good many white men I do not now recollect. I do not know them all. Mr. Prescott knows about it.

Question. What place was it at when Governor Ramsey told you that he would not pay the "annuities ?"

Answer. First at his own house ; then again at the agency, in the hall—all these Indians heard it.

Question. What white man was there, at Governor Ramsey's house ?

Answer. A good many white men were coming in and out. I do not recollect who they were. Joseph R. Brown was present.

Question. I want you to remember whether Governor Ramsey was present when Mr. Sibley told you that he would give you seventy horses and guns and pistols if you would sign that receipt ?

Answer. It was said at Mr. Sibley's house, by Mr. Sibley. Governor Ramsey was not present. "Shack-o-pee, or Little Six," heard it. I am ashamed of these things, but I did not get them. It was all wind, and we got nothing.

Question. Are you sure that Governor Ramsey said that he would not release these prisoners until you signed the receipt for ninety thousand dollars ?

Answer. Governor Ramsey did not say it to me himself, but through an interpreter. We were in a house together. Mr. Prescott was the interpreter. Twice Mr. Prescott interpreted and once Joseph R. Brown was the interpreter. I heard him say so three times.

Question. Where was it you heard him say so ?

Answer. At Governor Ramsey's house ; then at the "agency."

Question. What white men were present at Governor Ramsey's house when he refused to release the prisoners until you signed the receipt ?

Answer. I have said I do not recollect.

Question. What white men were present when this was said at the agency ?

Answer. I do not recollect. A good many were around there.

Question. Did Governor Ramsey pay you the two thousand eight hundred and fifty-seven dollars, your part of the twenty thousand dollars ?

Answer. Yes.

Question. Did you consent to sign this ninety thousand dollars receipt, after being advised by these half-breeds to do so ?

Answer. There were not many of them who advised me ; but Alexander Farribault advised me, and I signed it.

LITTLE CROW, re-examined by the government commissioners.

Question. Would you have consented to have signed this receipt if other inducements had not been held out to you, or if you could have gotten your money without it?

Answer. Probably I would not. I wished to see Wa-ba-shaw first. Mr. Farribault said that he wanted me to sign it without seeing him, (calling me brother at the same time.) He said he would draw some money himself, and if I would sign it he would give me three thousand dollars.

Question. You said yesterday that when Mr. Sibley offered you the horses, guns, and pistols, that Governor Ramsey was present; and to-day you have said that he was not present. How is this?

Answer. I was mistaken at first, or else it was not interpreted to me correctly. Governor Ramsey was not present. I have not talked to any white men about it since I was here yesterday. What I said to-day is the correct answer.

Re-examined by Governor Ramsey's counsel.

Question. Was Governor Ramsey present when Alexander Farribault told you he would give you three thousand dollars?

Answer. No. It was said outside.

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MAH-ZAH-HO-TA, or "Grey Iron," a chief of one of the Med-a-wa-kan-toan bands of *lower* Sioux Indians, was here sworn and examined as a witness. William Henry Forbes as interpreter.

Question. Did you hear Wa-ba-shaw last fall at the payment ask Governor Ramsey for the money due you under the treaty of 1851?

Answer. Yes.

Question. What did Wa-ba-shaw say to Governor Ramsey?

Answer. Wa-ba-shaw asked for the money, but our "father" would not give it to us.

Question. What did Governor Ramsey say in reply to Wa-ba-shaw's demand?

Answer. He said he would not pay it to us; that we should pay our debts; and if we would not pay them, that he would take the money back to our "great father" at Washington. To which Wa-ba-shaw replied: "Take it back to our great father; take it back." As I have already said, the governor kept talking about paying our debts. Wa-ba-shaw would not consent to it; nor would any of us consent to it.

Question. How did the chiefs direct Governor Ramsey to pay it?

Answer. They all thought seventy thousand dollars was too much to pay to the traders. They wanted to have the money paid into their own hands, and then for each one who was indebted to pay them themselves. We wanted him to pay it all together to us in the first instance.

Question. How long were you at the "agency" before you received your "annuity money?"

Answer. We waited for it two months, my father.

Question. What were you and Governor Ramsey doing there so long?

Answer. For all that time our "father," Governor Ramsey, would not pay it to us.

Question. What did he want you to do before he paid it?

Answer. The governor would not pay the "annuities" until we would agree to pay the traders seventy thousand dollars, and he would not give up the prisoners until the snow was upon the ground.

Question. Did Governor Ramsey talk to you about giving up the prisoners?

Answer. Yes; he said, when you have paid your debts, and signed a paper, then he would turn the young men out of prison.

Question. What paper were your chiefs to sign?

Answer. That paper to pay the debts, seventy thousand dollars; then, he said, they could come out.

Question. Did they sign it?

Answer. Yes.

Question. Where did you sign it?

Answer. Wa-ba-shaw and Wah-coo-ta signed it at night; Little Crow and others signed it at Mr. Sibley's next morning, and I then signed it in the fort, (Fort Snelling.)

Question. Were the prisoners then turned out?

Answer. Yes.

Question. Were any other chiefs present when you signed that receipt for ninety thousand dollars?

Answer. Wa-ba-shaw, Wah-coo-ta, Little Crow, and others had signed it, and Governor Ramsey said that I was the last, and I then signed it, with those who had not signed it before.

Question. Did the chiefs in "open council" direct Governor Ramsey to pay the traders this seventy thousand dollars?

Answer. I do not recollect any such thing. They never did in my presence.

Question. Were there twenty thousand dollars distributed among the chiefs?

Answer. Yes. I got two thousand nine hundred dollars.

Question. By whom was that money paid to you?

Answer. Governor Ramsey paid it. The agent was present.

Question. Were you to do anything for Governor Ramsey for this two thousand nine hundred dollars?

Answer. I do not recollect that it was paid for anything that we were to do.

Question. Did you sign a receipt to Governor Ramsey for ninety thousand dollars?

Answer. I did; and do not recollect what was said on the occasion.

Question. Did you sign the receipt before or after you got your "annuities?"

Answer. We signed the receipt first.

Question. How many days after that was it before the annuities were paid?

Answer. I do not recollect.

Question. Did any one in the presence of Governor Ramsey offer you anything to sign that receipt?

Answer. Governor Ramsey told me he would let the prisoners out and pay the money that the chiefs were to get, if I would sign it. I do not remember any body who said so.

Question. How much money did the Med-a-wa-kan-toan bands receive?

Answer. Seventy thousand dollars was paid to the traders, and twenty thousand dollars was paid to us chiefs.

Question. Did any of the Med-a-wa-kan-toan Indians get any money except the twenty thousand dollars.

Answer. All I got was two thousand and nine hundred dollars.

MAH-ZAH-HO-TA, or Grey Iron, cross-examined by Governor Ramsey's counsel.

Question. Who was present when Governor Ramsey told you that he would not pay you the money or release the prisoners until you signed the receipt for ninety thousand dollars?

Answer. Mr. Brown, Mr. Odell, and Mr. Sweetser. The room was full, but I do not remember any more.

Question. Where was this?

Answer. At Mr. Prescott's house in Mendota. Mr. Prescott was the interpreter.

Question. Where did you sign the receipt for the ninety thousand dollars?

Answer. At the fort, (Fort Snelling.)

Question. What white men were there when you signed it?

Answer. I knew but three, Mr. Prescott, the agent, Governor Ramsey, and the commanding officer of the fort.

Question. What house or place was it at, when Governor Ramsey said he would not pay the money, or release the prisoners?

Answer. It was in the fort.

Question. Were Brown, Sweetser, and Odell there?

Answer. No, it was not there that I saw them. It was at Mr. Prescott's where I saw them.

Question. Who was present when Governor Ramsey said this?

Answer. The persons I have named were there.

SHAK-O-PEE, or "Little Six," a chief of one of the Med-a-wa-kan-toan bands of *lower* Sioux Indians, sworn and examined as a witness. William Henry Forbes interpreter.

Question. Are you a Med-a-wa-kan-toan chief?

Answer. I am.

Question. Did you chiefs in open council direct Governor Ramsey how you wanted your "hand money" paid?

Answer. In a council with Governor Ramsey my brother Wa-ha-shaw asked him to have the money paid into our own hands; and he refused, and turned it another way.

Question. Did Wa-ba-shaw speak for all the Med-a-wa-kan-toan chiefs?

Answer. Yes.

Question. How many times did Wa-ba-shaw demand the money?

Answer. Twice, he asked for it at Mr. Prescott's house.

Question. Who interpreted for you?

Answer. Mr. Prescott.

Question. What did Governor Ramsey reply to Wa-ba-shaw when he asked for the money?

Answer. He refused, and said he would take it back to our great father, and we would die.

Question. Did you have any talk with Governor Ramsey about the release of the prisoners in the fort?

Answer. I had a conversation with him about them. Governor Ramsey said, if you will sign a paper, I will release them. He also said he would pay us the money and goods. He meant our money and goods due to us for our lands.

Question. What paper did he wish you to sign?

Answer. I have reference to the paper my brother Wa-ba-shaw signed, and which I signed at Mr. Sibley's house next morning. He did not name what was in it, but wanted us to sign it.

Question. How long were you waiting at the agency for your money before it was paid to you?

Answer. We were there two months. They made us suffer a good deal.

Question. Who paid you the money you waited for so long?

Answer. Major McLean, the agent.

Question. Did you get a plenty to eat while you were there waiting for your money?

Answer. We did not get anything from either of them. We suffered a great deal. Our children were like to die.

Question. What did Governor Ramsey want you to do, before he paid you the money, which kept you there so long?

Answer. Governor Ramsey said that if we would sign the paper, he would pay us our money and release the prisoners. That was *his song* for two months.

Question. Did you sign the receipt?

Answer. I have already told you that he went around and got us to sign it.

Question. Was it signed by the chiefs in open council?

Answer. Yes. Our traders were there, the Indians and all. Wa-ba-shaw and Wah-coo-ta had signed it before.

Question. Did any one in presence of Governor Ramsey offer you anything to sign that receipt?

Answer. No one told me so.

Question. How much of the twenty thousand dollars did you get?

Answer. Two thousand seven hundred dollars, and a little more. He gave it to me in a bag, tied up.

Question. Who paid you that money?

Answer. Governor Ramsey paid it to me.

Question. Who signed the receipt for the ninety thousand dollars when you signed it ?

Answer. Tah-o-ah-ta-doo-tah, or Little Crow, We-chonk-pee, or the Star, and Tah-chan-koo-wash-ta, or Good Road, signed it when I did. Mr. Sibley *held the pen* when I signed it. Governor Ramsey was present.

Question. What were you to do for this money ?

Answer. He came suddenly and paid me.

SHAK-O-PEE, or Little Six, cross-examined by Governor Ramsey's counsel.

Question. Was there any division among the chiefs in regard to the payment of this money in the council in which Wa-ba-shaw demanded to have it paid into their own hands ?

Answer. We were all of one opinion that the money should be paid into our own hands. That was the reason why we authorized Wa-ba-shaw to speak for us.

Question. Was there any difference of opinion among the chiefs with regard to how much should go to the half-breeds and how much to the traders ?

Answer. They were all of the same opinion. They wanted the money paid into their own hands.

This question was repeated, when he answered that they had done a good deal for their traders and half-breeds before, and they wanted this time to have the money in their own hands.

Question. Did you not direct Governor Ramsey to pay this money to the traders ?

Answer. I do not recollect to have done so.

Question. Did not Tah-chan-koo-wash-ta, or Good Road, tell Governor Ramsey to do so ?

Answer. I did not hear him say so ; neither do I know that he did say so.

Question. Did not Tah-o-ah-ta-doo-tah, or Little Crow, say so to Governor Ramsey ?

Answer. I do not know that any chief said so.

Question. Where was it that Governor Ramsey told you that he would neither pay you your "annuities" nor release the prisoners until you signed the receipt for the ninety thousand dollars ?

Answer. I told you yesterday that it was at Mr. Prescott's.

Question. What white men were present at that time ?

Answer. All the traders and half-breeds of the St. Peters were there. Alexander Farribault, David Olmstead, Mr. Sibley, and various others were there.

Question. Who interpreted on that occasion ?

Answer. Mr. Prescott.

Question. What time was this ? Was it when Wa-ba-shaw demanded the money ?

Answer. Yes ; we all heard it, and listened to it as Orphans.

Question. At which of those councils did Governor Ramsey say this ?

Answer. At both of them.

Question. Who were present ?

Answer. I have already said who were present.

Question. What white men were there?

Answer. The Indians and white men were all there together.

Question. Was not the paper you signed at Mr. Sibley's house?

Answer. No.

Question. Did you not know that you were signing a receipt of ninety thousand dollars?

Answer. I did not know what I was signing. I did not know what was in it.

Question. You said on yesterday that you staid at the "agency" for two months. Can you fix the time when you went there?

Answer. I went there the month when the Indians gather "wild rice," and staid there until the "bucks cast their horns"—about two months.

Question. Were Mr. Steele and Mr. Fillmore there?

Answer. Mr. Steele and Mr. Fillmore were there.

Question. Were there not *provisions* issued to the Indians while you were there?

Answer. I do not know of any *provisions* being issued to the *seven* bands of the Med-a-wa-kan-toans, while we were there.

Question. Where were you when Governor Ramsey gave you that bag of money?

Answer. At the agency.

Question by government commissioners. Why were the councils removed from the agency at Fort Snelling to Mendota?

Answer. It was because Governor Ramsey went to Mr. Sibley's house at Mendota. It was not the request of the Indians that they should be held there.

Question by Governor Ramsey's counsel. Had not Governor Ramsey a right to hold the councils where he pleased?

Answer. He could hold a council in the house of Mr. Sibley, or any other place he might choose.

Question. Did the Indians not complain that the rooms were too small at the "agency," and that they wished the councils removed to Mendota on that account?

Answer. I never told him that, and I do not believe that any other Indians ever did.

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WE-CHONK-PEE, or the "Star," a chief of one of the Med-a-wa-kan-toan bands of *lower* Sioux Indians, sworn and examined as a witness. William Henry Forbes, interpreter.

Question. Are you a chief of one of the Med-a-wa-kan-toan bands?

Answer. I am a chief of the Lake Calhoun band of the Med-a-wa-kan-toans.

Question. Did you hear Wa-ba-shaw direct Governor Ramsey how you wanted your money paid which was due under the treaty of 1851?

Answer. Yes. I heard Wa-ba-shaw say: "My father, I want you to give us our money; we have waited for it a long time." The governor then said, "When you sign a paper, then I will pay you your money and annuities." Wa-ba-shaw replied, "Until you give me the

money I will not sign any paper." Governor Ramsey then said, "If you do not sign the paper, I will take the money all back to your great father." Wa-ba-shaw then said, "Take it back; if I am to be miserable, or even if I die, it is well."

Question. Where was this talk between Wa-ba-shaw and Governor Ramsey?

Answer. At the house where we were in the habit of holding councils, in the hall of Mr. Prescott's house.

Question. Who interpreted at that time?

Answer. Mr. Prescott.

Question. What white men were there on that occasion?

Answer. The room was filled. All those white men who speak the Sioux language were there. Mr. Campbell, Mr. Labatte, David Olmstead, and Mr. Farribault; some of the officers of the fort, and a good many Americans.

Question. Was anything said about releasing prisoners?

Answer. Yes, it was mentioned. The governor said to us, "If you will sign the paper, the young men who are in confinement, belonging to four of the bands, I will release." He had a paper which he wanted us to sign, but we did not want to sign it. Wa-ba-shaw said, "When you give us our blankets and money, then we will sign the paper."

Question. Was anything said, or offered to you, if you would sign that paper, by any one, in Governor Ramsey's presence?

Answer. I never heard any one say so, in Governor Ramsey's presence.

Question. How came you to sign the receipt for the ninety thousand dollars?

Answer. I signed the receipt. Mr. Frederick Farribault came for me, and I went and signed it at Mr. Sibley's house.

Question. Did all the chiefs sign it, in open council, at Mr. Sibley's house?

Answer. Tah-o-ah-ta-doo-ta, or Little Crow, was present; and Shak-o-pee, Tah-chan-koo-wash-ta, or Good Road, and myself, were present. Governor Ramsey said that Wa-ba-shaw and Wah-coo-ta had signed it the night before.

Question. How long were you waiting for your money at the "agency" at Fort Snelling?

Answer. We remained there and suffered for two months—until the snow fell.

Question. Were provisions issued to the Indians during these two months?

Answer. No. There were no provisions issued to us at all; they (Governor Ramsey) wanted us to die of hunger.

Question. Were you prevented from going on your "*fall hunts*" by this delay?

Answer. There were a good many industrious men among us, who hunt furs for the traders, who were prevented from going on their hunts for the want of the money and goods which Governor Ramsey held in his arms.

Question. How much of the twenty thousand dollars which was distributed among the chiefs did you get?

Answer. I got two thousand eight hundred and fifty-three dollars. Governor Ramsey paid it to us himself. He paid it so as to assist the soldiers and young men to live.

Question. Did Governor Ramsey tell you that it was to be given to the "half-breeds?"

Answer. I did not hear Governor Ramsey say so. I did not hear any of the chiefs promise Governor Ramsey to pay it to their "half-breeds."

Question. Did you hear the chiefs tell Governor Ramsey to pay seventy thousand dollars to the traders?

Answer. I did not hear them tell him any such thing; nor did I hear them tell him how much to set aside for our removal and subsistence.

MOCK-PEE-WE-CHAS-TA, or 'The Cloud Man, a *young* chief of the Med-a-wa-kan-toan Sioux Indians, sworn and examined as a witness. William Henry Forbes, interpreter.

Question. Did you hear Wa-ba-shaw direct Governor Ramsey, in "open council," how you wanted your money paid under the treaty of 1851?

Answer. I will begin at the commencement. When the money was first asked for, it was I who asked for it at Mr. Sibley's. Everybody was there—Indians and white men. Even the *women* were present. Wa-ba-shaw asked for the whole of the money. The governor told Wa-ba-shaw that whenever he signed *the paper*, he would give him the *old* annuities and the *new* annuities. After Wa-ba-shaw had asked for the money, and the governor had refused to give it, the governor then said, if you do not want the money, I will take it back to your "great father." Wa-ba-shaw told him, "Take it back, even if I die." We again asked for the money, and the governor again asked us to sign the receipt.

Question. What receipt was it that the governor wanted you to sign?

Answer. A paper having reference to the debts, I believe, and about those Indians who were in prison for killing the Chippewas.

Question. Was anything said about releasing the prisoners by Governor Ramsey?

Answer. Governor Ramsey said, what the others have told you, "that if they would sign the paper, they would get their annuities, and the prisoners would be released."

Question. Was Wa-ba-shaw authorized to speak for all of the *seven* Med-a-wa-kan-toan bands.

Answer. Yes, *he was*; we were all of that mind. We wanted to have the money paid to ourselves.

Question. How long were you waiting for your money at the "agency" at St. Peter's.

Answer. We remained there two months. Our children were nearly starving. We staid until the snow fell.

Question. Were there any *provisions* issued during that two months to the Indians?

Answer. I do not know of any.

Question. Were the Indians prevented from going on their "*fall hunts*" in consequence of their not getting their money?

Answer. Yes.

Question. Did the Indians request Governor Ramsey to remove the councils to Mendota from the agency?

Answer. No; no one asked him to do so. Governor Ramsey was over at Mendota with the traders, and I do not know who proposed it; but we were sent for to come to Mendota.

Question. How much of the twenty thousand dollars which was given to the chiefs did you receive?

Answer. Two thousand five hundred and three dollars.

Question. Who paid you that money?

Answer. Governor Ramsey paid it to me.

Question. Did Governor Ramsey tell you to pay this money to the "half-breeds?"

Answer. No; but I heard it said, "You can give it to your 'half-breeds' if you wish, or you can do as you please with it."

Question. Did you hear the chiefs tell Governor Ramsey to pay seventy thousand dollars to the traders?

Answer. When I heard that they were going to take seventy thousand dollars for the debts, I said at the first council that was too much; that we had paid our debts once before; that we wanted the money paid into our own hands. We never told Governor Ramsey to pay seventy thousand dollars to our traders.

Question. Did you sign the receipt for ninety thousand dollars to Governor Ramsey?

Answer. The paper was signed by Wa-ba-shaw and Wah-coo-ta at night; by Tah-o-ah-ta-doo-ta, or Little Crow, and others, the next day; but at neither of these times was it when I signed it. The governor said to me, "Here, you have not signed the receipt." (This was after the goods were distributed under the old treaty.) I signed it then, because I thought probably I would not get the money if I did not. The governor had the money in a bag, and when I signed the papers he gave me the money.

MOCK-PE-WE-CHAS-TA, or "Cloud Man," cross-examined by Governor Ramsey's counsel.

Question. Was this money demanded by you in "open council?"

Answer. Yes. A great many people were there.

Question. Who interpreted at that council?

Answer. William H. Forbes.

Question. What white men were present?

Answer. I do not know the names, or I would name them. Mr. Sibley was inside looking through the window. The traders were there.

Question. Was it in the presence of these people that Governor Ramsey said he would release the prisoners and pay the money if they would sign a receipt?

Answer. No. It was in the council where Wa-ba-shaw asked for

the money. I saw Mr. Rock, Mr. Labatte, and Mouseau's son, Alexander Farribault, David and Frederick, Joseph Renville, and Major McLean there. I did not see Mr. Sibley there. Mr. Prescott was sick and did not interpret. Mr. William H. Forbes and Mr. Farribault interpreted.

Question. Where did you sign this receipt for the ninety thousand dollars?

Answer. At Major McLean's.

Question. Did Governor Ramsey then pay you the two thousand five hundred and three dollars?

Answer. He did.

Question. Who was present at the time?

Answer. Alexander Farribault was the interpreter. Those I named a while ago were there. I cannot tell all who were there.

Question. When did you receive the two thousand five hundred and three dollars?

Answer. Last fall. We were there two months. I cannot tell at what time I received it.

JOHN CAMPBELL, sworn and examined as a witness.

Question. Were you at the payment at Traverse des Sioux, in 1852, or last fall?

Answer. I was.

Question. Did you hear the chiefs in open council, at Traverse des Sioux, direct Governor Ramsey how they wanted their money paid under the treaty of 1851?

Answer. Yes. The chiefs asked Governor Ramsey to pay their money into their own hands. The governor said that he would not pay it to them. He wanted the Indians to sign a paper for the traders and to pay their honest debts. The Indians asked to have the traders to show their books before they paid them. They meant the fur company's books—Mr. Sibley's books. Governor Ramsey said that he wanted them to sign a "paper."

Question. Did the governor pay them anything?

Answer. No. He wanted them to sign a paper.

Question. Did you hear Governor Ramsey ask the Indians to sign a receipt for the two hundred and fifty thousand dollars?

Answer. I did not. I heard him ask them to sign a paper; but I did not hear him say how much it was for.

Question. How many times did you hear the chiefs demand this money of Governor Ramsey?

Answer. Three times, at three different councils. One time at each council. Mah-zah-shah, or Red Iron, spoke for all the chiefs. When Governor Ramsey could not do anything with Red Iron he told him that he was a fool, and that he would not speak to him.

Question. Look at Senate document No. 29, part 2, and page 7, and say whether the Indians whose names are signed to that receipt are chiefs?

Answer. The two first named are chiefs, but none of the others; some of them I do not know. I was only at three open councils, and there were none others that I know of.

Question. Was there any such receipt as that shown you on page 7, Senate document No. 29, part 2, signed in open council?

Answer. No; not that I ever heard of. I did not see that paper signed by any of the chiefs.

Question. Did the chiefs in open council direct Governor Ramsey to pay two hundred and ten thousand dollars to the traders?

Answer. No.

Question. Were you at the payment of the Med-a-wa-kan toans and Wah-pa-koo-tas last fall, at the St. Peter's agency?

Answer. Yes; and was at all the open councils held there.

Question. Did you hear the chiefs direct Governor Ramsey how they wanted the money due to them under the treaty of 1851 paid?

Answer. Yes; they wanted all their money paid into their own hands. The governor said that he would not pay it to them. He wanted the Indians to sign a "*paper*" to pay their debts. Wa-ba-shaw said he wanted to get the money and then let each man pay his own debts. Governor Ramsey said that he would not pay it. I heard this request made at several councils; I do not remember how many, but he refused at every council.

Question. Did you hear the governor requested by the Indians to discharge the prisoners who were confined in the fort?

Answer. I did; and the governor said that he would not release them until they signed a paper to pay their honest debts. I heard this request made more than once. I did not see the chiefs sign the receipt for ninety thousand dollars.

Question. Were you at any council when Governor Ramsey was present, at Mendota, when anything was said about paying their debts or releasing these prisoners?

Answer. Yes, I was. It was at Mr. Sibley's house last fall, before the "*annuity payment*." Mr. Forbes, Alexander Farribault, Mr. Sibley, Governor Ramsey, Samuel Finley, Jack Frazier, Mr. Rock, and a good many others, and some Indians, were present. They were talking about the receipt for ninety thousand dollars. Governor Ramsey wanted them to sign it; and said *if they would sign it he would release the prisoners and pay their annuities*. The Indians would not sign the receipt, and Governor Ramsey then told them that he would take the money back to their great father. Wa-ba-shaw told him to take it back, and he would keep his land. This council was in the day time.

Question. Was there any liquor given to the Indians during the time they were assembled to receive their annuities, or to hold councils with any of the government officers?

Answer. There was some given to Little Six's brother in Mr. Sibley's office, and he was drunk; and Bad Hail was also drunk. I do not know where they got the liquor. They were all the drunken Indians I saw.

Question. How long were the Indians kept at the "*agency*" before the payment of their annuities last fall?

Answer. I do not know. I was at Traverse des Sioux and do not

• know when they assembled. They were paid in cold weather. *The river was frozen when they were paid.*

JOHN CAMPBELL cross-examined by Governor Ramsey's counsel.

Question. Did you hear Governor Ramsey tell the chiefs that he would not pay their annuities until after they had signed a paper, at Traverse des Sioux?

Answer. I did; in one of the "mission houses" at Traverse des Sioux. Alexander Farribault, Mr. Bailey, Red Iron, Limping Devil, (Big Gun,) or Running Walker, and Sounding Moccasin were there.

Question. What white men were present?

Answer. Mr. Sibley, Mr. Sweetser, Mr. Huggins, Mr. Brown, Mr. Franier, and Jo. Campbell.

Question. What paper was this that Governor Ramsey wanted them to sign?

Answer. The fur company's paper.

Question. Where was it when the governor refused to pay them, unless they signed the paper, the other times you have mentioned?

Answer. At the "mission-house."

Question. Who were present on that occasion?

Answer. Jo. Campbell, Mr. Sibley, Mr. Sweetser, and those named before, were there in all three of these councils.

Question. Do you know all the chiefs of the See-see-toan and Wah-pa-toan bands of upper Sioux Indians?

Answer. I know some of them, Mah-zah-shah, or Red Iron; E-tay-wah-kee-an, or Limping Devil; E-yang-mo-nec, or Running Walker; O-pee-en-dah, or Big Curley Head; Wah-min-da-ne-chah, or the Orphan; Wah-nok-soon-ta, or the Little Rapids chief; and Ish-tah-hum-bah, or Sleepy Eyes.

Question. Now about the lower treaty at Mendota; where was it that Wa-ba-shaw demanded the money of Governor Ramsey?

Answer. At Mr. Prescott's house.

Question. How many times?

Answer. A good many times.

Question. Did you hear him demand it at Mr. Sibley's?

Answer. Yes; in open council.

Question. Who were present at Mr. Sibley's?

Answer. Mr. Forbes, Mr. Farribault, Samuel Finley, Mr. Rock, and Mr. Steele. These men were at Mr. Sibley's.

Question. Who were present at Mr. Prescott's?

Answer. Mr. Steele, Jack Frazier, Jo. Campbell, Alexander Farribault, Mr. Forbes, and a good many others. At the last council Mr. Steele was not there, nor Mr. Rock, nor Labatte. All the chiefs were there except Wah-koo-ta, and he was sick.

Question. How do you know that liquor was given to the Indians at Mr. Sibley's?

Answer. All I know is that I saw Bad Hail and Little Six's brother drunk. I saw no liquor there.

Question by government commissioners. When you went into this

council at night at Mr. Sibley's, did the Indians cover their heads with their blankets?

Answer. Yes.

Question. What did they cover their heads for?

Answer. I suppose to keep any one from knowing them.

JOHN W. BABCOCK, sworn and examined as a witness.

Question. Were you at Traverse des Sioux last fall when the See-see-toan and Wah-pa-toan chiefs came to Governor Ramsey with a paper just as the governor was about to leave for St. Paul, and presented it to him at Mr. Merrick's store?

Answer. Yes; I was. The Indian chief Mah-zah-shah, or Red Iron, presented a "paper" to Governor Ramsey. Red Iron insisted upon the governor's looking at the paper. Governor Ramsey told him that he was in a hurry, but said he would look at it at his leisure, or to that effect. The governor took the paper with him. I am not positive about the chiefs asking the governor to hold a council; but I know that Red Iron insisted on his acting upon the "paper" then; and that Red Iron seemed excited. His team was then ready and waiting for him, and the governor then left Traverse des Sioux for St. Paul.

J. W. BABCOCK cross-examined by Governor Ramsey's counsel.

Question. Was not Governor Ramsey then ready and bundled up to start?

Answer. I think he was, and came in for something to my store. The team and sleigh were in front of my house.

Question. Did he not get into the sleigh and leave immediately?

Answer. I cannot say; but I know that he left that morning.

Question. Who interpreted for Governor Ramsey there at that time?

Answer. I think it was the young man who interpreted for us in the store. This was the last of November, 1852, and after Governor Ramsey had returned from Washington. It was after the payment had been made, perhaps two days. I mean the "*annuity payment*."

Re-examined by government commissioners.

Question. How long were the Indians kept there at Traverse des Sioux before the payment?

Answer. I cannot say.

Question. Of whom did the sleigh load consist?

Answer. I do not know exactly. I think of Governor Ramsey, Mr. Dousman, and Mr. Sibley; but am not certain.

NATHAN MERRICK, sworn and examined as a witness.

Question. Were you at Traverse des Sioux, at the time of the payment of the See-see-toan and Wah-pa-toan Indians, in the fall of 1852?

Answer. I was.

Question. How long were the Indians kept at Traverse des Sioux, before the payment?

Answer. They were there a week after I arrived there. I do not know how long they had been there before.

Question. Were you present when the chiefs of the Wah-pa-toan and See-see-toan Sioux Indians presented a paper to Governor Ramsey?

Answer. I was. Red Iron was one, and Sleepy Eyes was another chief. They handed the paper to the governor, and he said that he had not time to read it. He was then ready to start. The Indians wished to talk with him, and the governor asked them what they wanted to say, (through a half-breed interpreter.) The chiefs then said, that if he could not stop to read it, they wanted to tell him what was in it. They then told him that it was a "*protest*" against his paying out their money to the traders, as was talked of, or words to that effect. Governor Ramsey took the "*paper*," and said that he had not time to read it then, but would read it at his leisure, or words to that effect; or that he would see about it.

Question. Has Governor Ramsey talked to you about that paper since?

Answer. The governor told me yesterday, that he thought the paper was something about some *provisions*; and he said that he presumed if I had not been subpoenaed that I would be.

Question. What impression was left on your mind by the governor's conversation on yesterday?

Answer. I suppose he intended me to understand that the "*paper*" was about some *provisions*, and that this was what the talk he had with the Indians was about.

NATHAN MERRICK, cross-examined by Governor Ramsey's council.

Question. Did Governor Ramsey directly or indirectly say, or intimate, what he wanted you to say as a witness?

Answer. I do not know that he did. He made the remarks which I have mentioned before. He asked me the question, and then answered it himself before I spoke.

Question. To the best of your recollection, was not the conversation between Governor Ramsey and the Indians about *provisions*?

Answer. No; I heard nothing said about *provisions*.

Question. Did you hear any conversation after they came out of your house?

Answer. No.

Question. Has any body else talked to you on this subject?

Answer. No; I have told it several times last winter, in reference to matters which took place at my store at Traverse des Sioux.

DAVID FULLER, sworn and examined as a witness.

Question. Were you at the payment of the See-see-toan and Wab-pa-toan Sioux Indians, at Traverse des Sioux, in the fall of 1852?

Answer. I was.

Question. Were you in any open council held at that place?

Answer. No, nor private council.

Question. Were you at the payment last fall at the St. Peter's agency, at Fort Snelling?

Answer. Yes; and at a council held at the interpreter's house.

Question. Did you hear Wa-ba-shaw demand of Governor Ramsey to have the money due to them under the treaty of 1851 paid into their own hands?

Answer. I am of the opinion that he wished it paid into their own hands.

Question. What was Governor Ramsey's reply?

Answer. The governor replied, that he had so much money then to give them; that they could take that or nothing; or rather, that they could take that, or that he would take the whole of the money back to Washington. Wa-ba-shaw replied, "take it back, and we will take back our lands." The governor referred to the money that was afterwards paid out.

Question. At what time last fall did this take place?

Answer. In the month of November, I think. I think it was the last council. I then left, and I think the council broke up very soon afterwards.

Question. How long were the Indians assembled at the "agency" before they were paid their annuities?

Answer. I was there three weeks, but they might have been there six weeks. But I should think that they were there six weeks altogether.

Question. Do you know why these chiefs held out all this time?

Answer. I suppose it was because they would not sign the receipts.

Question. Do you know that the Indians constantly, during all this time, refused to sign the receipts?

Answer. I do.

Question. Why was the payment of the annuities delayed this length of time?

Answer. I suppose it was because the papers were not all fixed. That is my impression. I had no claim of my own.

Question. Did you hear the chiefs request Governor Ramsey to discharge the Indian prisoners who were confined in the fort?

Answer. I think not.

DAVID FULLER cross-examined by Governor Ramsey's counsel.

Question. Were you present at all the councils held at the "agency" at St. Peter's in the fall of 1852?

Answer. I was not.

Question. Did you ever hear the Indians refuse to sign a "paper" that Governor Ramsey wanted them to sign?

Answer. No.

Question. How do you know they were kept there because they would not sign this paper or receipt?

Answer. Because the Indians told me so themselves.

Question. Was the forty thousand dollars "annuity money," or money due for their lands?

Answer. I think it was money due for their lands.

Re-examined by the government commissioners.

Question. Did Governor Ramsey in this council, to which you allude, desire the Indians to pay their debts?

Answer. He did.

Question. Did they refuse to do so?

Answer. They did.

Question. Was this the last council held by them?

Answer. I think it was; but they may have assembled once afterwards.

Question. Were the Indians paid their "annuities" before or after the receipt was signed by them?

Answer. I do not know.

—

PHILANDER PRESCOTT, an interpreter, and superintendent of farming, &c., for the Sioux Indians, residing near Fort Snelling, sworn and examined as a witness.

Question. Were you a government interpreter in 1851 previous to July?

Answer. I was not. I was an Indian farmer in 1851, but I was requested a part of the time to interpret by and for Governor Ramsey.

Question. Were you at the treaty at Mendota in August, 1851?

Answer. I was.

Question. Were you at the payment at the "St. Peter's agency" in the fall of 1852?

Answer. I was not.

Question. Were you at any of the councils at the "agency" last fall between Governor Ramsey and the Med-a-wa-kan-toans and Wa-pa-koo-ta chiefs of the *lower* Sioux Indians?

Answer. I was at one at the "agency."

Question. Did you hear the chiefs at the council direct Governor Ramsey how they wanted their money paid which was due to them under the treaty of the 5th of August, 1851?

Answer. I heard Wa-ba-shaw tell Governor Ramsey to pay over what was called the "trader's money," or "hand money," into their own hands. He also demanded all the *back* money, particularly the school fund, to be paid over to them. Wa-ba-shaw demanded this "trader's money," or "hand money," two or three times to be paid over to them. Governor Ramsey replied and said, that he could not pay it over to them. I do not recollect that Governor Ramsey gave a

reasons for not paying it. Wa-ba-shaw again insisted upon the money, being paid over to them. The end of it was that the Indians got up and left the council. One chief and two principal soldiers got up just before they left and said they were willing to pay their debts. "Good Road" was the chief. Wa-ba-shaw said, *that he was authorized to speak for all the others, they being present, and not dissenting.*

Question. When did they first assemble at the "agency" for the purpose of this payment?

Answer. Some time in the forepart of November, 1852. They commenced assembling in October.

Question. When did they get their "annuities?"

Answer. They got their annuities some time in the forepart of the month of November or December. I was sick at the time.

Question. Were you present at any other council?

Answer. I was not when Governor Ramsey was present.

Question. When Governor Ramsey said he would not pay them the money, what did he say he wanted the chiefs to do with the money?

Answer. After Good Road, Eagle Head, and Bad Hail had said what they did, Governor Ramsey replied, "there appears to be some division among you. I wish you would get together and do something."

Question. Who is looked upon as the head chief of the Med-a-wa-kan-toan bands?

Answer. Each chief is the head of his own band. I have heard a few Indians speak of Wa-ba-shaw as the head chief.

Question. Were you the interpreter at Governor Ramsey's house in the councils held with the See see-toan and Wah-pa-toan chiefs before Governor Ramsey went to Washington for the money?

Answer. Myself and Mr. Laframbois were the interpreters.

Question. How long were the chiefs here at that time?

Answer. Some two weeks and four or five days before they signed the amendments to the treaty.

Question. At what place was that power of attorney you see on page 26, Senate document No. 29, part 2, authorizing Governor Ramsey to go to Washington and draw their money, signed?

Answer. It was signed in Governor Ramsey's office.

Question. Was any promise made by Governor Ramsey to the chiefs as to how the money should be paid after he returned with it from Washington?

Answer. If the President gave it to him, he promised that he would apply it to carry out the intent of the treaty of 1851.

Question. What did Mah-zah-shah, or Red Iron, say to him on that subject?

Answer. "Red Iron" was not here.

Question. Was Ish-tah-hum-bah, or Sleepy Eyes, here?

Answer. No; his nephew was here.

Question. Was "E-tay-wah-ke-an, or Limping Devil," here?

Answer. Yes.

Question. Was "Wah-min-da-ne-chah, or the Orphan," here?

Answer. No.

Question. Was "O-pee-en-dah, or Big Curley Head," here?

Answer. Yes.

Question. Was Wah-nok-soon-ta, or the Little Rapids chief, here?

Answer. He was not here.

Question. Was "Tah-hum-pa-hen-dah, or the Sounding Moccasin," here?

Answer. No.

Question. How many chiefs are there of the *upper* Sioux bands?

Answer. You will find *eleven* enrolled on the roll-book of the agency.

Question. How many of them are on that "paper" executed at Governor Ramsey's house?

Answer. I find *four* on that list.

Question. How long have the two young chiefs been known as such—I mean "No-hope-ton and O-pec-ya-hen-da-ya?"

Answer. I do not know. I found them named as such last winter, on the roll.

Question. Where does "No-hope-ton" live?

Answer. At "Lac Traverse."

Question. Are there two chiefs of the "Lac Traverse" bands?

Answer. There are three distinct parties, as I am told.

Question. How old is "No-hope-ton?"

Answer. I should say that he is thirty or thirty-five years old.

Question. Did No-hope-ton sign the treaty as a chief?

Answer. I do not see his name on the list.

Question. Look and see if "No-hope-ton's" name is on the "Traders' Paper."

Answer. No, it is not.

Question. How many chiefs are on Governor Ramsey's receipt for the two hundred and fifty thousand dollars on page 7, Senate document No. 29, part 2?

Answer. I see six names of chiefs on that paper, including that of No-hope-ton.

Question. Is Wah-na-ta a Yankton or a See-see-toan Indian?

Answer. The Indians say that he is half of Yankton and half See-see-toan.

Question. Is Wah-na-ta on your roll as a chief?

Answer. Yes.

Question. What did the Indians understand were the contents of that power of attorney which was given to Governor Ramsey at his own house?

Answer. The Indians were told what the contents were, before they went to Governor Ramsey's office, by Major McLean and Henry M. Rice. The Indians were told that it destroyed all former powers of attorney, and gave Governor Ramsey the power to bring the money here for them. The two former powers of attorney that the Indians understood it to destroy were one of Mr. Sibley's (the "Traders' Paper") and one to Mr. Sweetser.

Question. Were you the interpreter when this explanation was made to the Indians?

Answer. Yes.

Question. Are you now a government interpreter?

Answer. No. I am the superintendent of Indian farming, &c.

Question. Do you speak the Sioux language?

Answer. Yes.

Question. Was Mr. Laframbois present when this power of attorney was interpreted to the Indians ?

Answer. No.

Question. Were the old chiefs who were not here when that power of attorney was given to Governor Ramsey sent for, or notified to attend here, on that occasion ?

Answer. There were some persons sent for them to request them to come and sign the amendments to the treaty, That is all I know. I do not know that they were sent for to sign the power of attorney.

Question. Had you your books at Traverse des Sioux at the time of the treaty, or your accounts against the Indians ?

Answer. No.

Question. Upon what authority did they allow you thirteen hundred and twenty-four dollars ?

Answer. I do not know. I left a paper with the amount in dollars and cents on it. It amounted to four thousand three hundred dollars or more.

Question. By what rule did they cut you down from four thousand three hundred to thirteen hundred and twenty-four dollars ?

Answer. I do not know.

Question. Did you authorize any one to appoint a "committee" to apportion the claims of the traders ?

Answer. No.

Question. Have you received the amount of your account, which was allowed to you ?

Answer. I have received a part of it. I was told that there was *fifteen* per cent. taken out of it. Mr. Franklin Steele sent me the money. I have never asked any one what this fifteen per cent. was for, nor do I know what it was for. I remonstrated against it in a letter to Mr. Sibley. I did not know who had the management of the business. I signed a power of attorney to Hugh Tyler. Hugh Tyler came to my house with Governor Ramsey, and wanted me to sign a power of attorney to enable him to draw the money. Nothing was said about his deducting *fifteen* per cent. out of it, that I recollect.

Question. What reason did he give in Governor Ramsey's presence for asking you to sign, or give him that power of attorney ?

Answer. He gave me no reason for doing so.

Question. In what kind of funds were you paid ?

Answer. I received in all about fifteen hundred dollars in paper money, and about nine hundred dollars in gold.

Question. Did you draw any money in right of your children; or did your children, or any one of them, draw any money as half-breeds ?

Answer. No; they drew nothing.

Question. Are your children *half-breed Sioux* ?

Answer. Yes.

Question. What is the reason you did not draw money for them as half-breeds ?

Answer. I do not know. There was a petition got up to Governor Ramsey to divide all this money equally among all the half-breeds

Question. Did you sign an order to Mr. Sibley to draw your money from Governor Ramsey?

Answer. I have no recollection of signing any such paper. I signed two papers while I was sick. I supposed them both to be powers of attorney. I signed them to Hugh Tyler when Governor Ramsey was present.

PHILANDER PRESCOTT cross-examined by Gov. Ramsey's counsel.

Question. Did not Governor Ramsey, at the time you went there, simply ask, whether this power of attorney had been explained to the Indians?

Answer. I do not recollect that the governor said anything to them, until the Indians first mentioned that they wished him to write to their great father, or to take a paper for them to their great father, requesting him, (their great father,) to destroy the powers of attorney which they had signed before, and also requesting him in said paper to send them their money for their land.

Question. Is that the power of attorney you allude to?

Answer. That appears to be the tenor of the same paper.

Question. Did not the Indians fully understand that paper, before they went to Governor Ramsey with it?

Answer. I believe they did.

Question. Was not "Ya-zoo-ah-pee" the principal soldier of the "Little Rapids" band, representing his chief here; and is he not the "speaker" for his band—doing the business of his chief?

Answer. All I can say is, that Ya-zoo-ah-pee was here, and that Governor Ramsey asked him if he would sign, and that he said yes.

Question. Are not "E-yang-mo-nee," E-tay-wa-ke-an, Ish-tah-hum-ba-koash-ka, "Oo-pee-ya-hen-da-ya," and No-hope-ton, chiefs; and Mah-kah-een-day the chief man of the "Orphans" band, representing his chief; and did he not so say at the time?

Answer. The first is a chief; the second is a chief also; the next is the son of a chief; and when the old man is absent, the young one does the business. The fourth is a chief. I find the Indians acknowledge No-hope-ton to be a chief, but how long since I do not know. "Mah-kah-een-day" came here and said that his chief was absent. That he was told that he and his chief had been sent for to sign the amendments to the treaty. When he went before Governor Ramsey, he was asked by the governor if would sign for his chief, and he said "yes," and signed the amendments to the treaty.

Question. How much of a band has "Wah-na-ta?"

Answer. About three hundred in all.

Question. How much of a band had "O-tak-e-ta?"

Answer. Less than two hundred.

Question. How much of a band has "Ish-ta-hum-ba-koash-ka?"

Answer. About four hundred.

Question. Is not Wah-na-ta's band one of the largest of the bands on the list?

Answer. I think that it is about the *third* on the See-see-toan list.

Question. With whom did you leave your account against the Indians at Traverse des Sioux?

Answer. With Governor Ramsey.

Question. Did you request that attention should be paid to it?

Answer. I asked Governor Ramsey to hand my account in, if a dividend was made there.

Question. Was your account for the four thousand and three hundred dollars justly due to you?

Answer. Yes; that was the original account without interest.

Question. Did you swear to its correctness?

Answer. I did not.

Question. Had the money been paid into the hands of the Indians what would have become of it?

Answer. I think they would have used most of it up themselves. They would have paid a very small portion of it to their traders.

Question. If this money had been paid to them, would they have set aside twenty thousand dollars for their removal and subsistence?

Answer. A very small portion of them would have done so.

Question. Were the Indians advised or informed, before they went to Governor Ramsey's house, that they were to sign two papers?

Answer. They were told that they were to sign two papers; one a power of attorney, and the amendments to the treaty.

Question. Did they go to Governor Ramsey for that purpose?

Answer. They did.

Question. Had they a perfect understanding of these two papers at the time?

Answer. I believe they had.

Question. Did not Governor Ramsey say that if it was their wish he would take the power of attorney?

Answer. He made some such remark; I do not recollect distinctly.

Question. Are not your children Med-a-wa-kan-toan half-breeds?

Answer. Yes.

Question. Did not Governor Ramsey, when Wa-ba-shaw demanded the *debt* and *school* fund, simply advise the Indians to come to some understanding among themselves, as there appeared to be some division among them?

Answer. I said that yesterday.

Question. What do you know about the prisoners confined at the fort for killing the Chippewas?

Answer. They were confined by order of Governor Ramsey for killing some Chippewa Indians.

Question. In Governor Ramsey's intercourse with the Indians, has his treatment towards them been harsh or uniformly kind?

Answer. I have known him to be very kind and lenient towards them. I have never known him to be harsh or tyrannical.

Question. Were not the chiefs and Indians collected at the "agency" long before Governor Ramsey got back from Washington with their money?

Answer. I believe some of them were collected there before Governor Ramsey got back; or before Major McLean returned from St.

Louis. Major McLean brought the "annuity money" under the treaty of 1837 with him from St. Louis.

Question. Did Governor Ramsey, when you were present, ever tell the chiefs that he would not pay their "annuities," unless they paid their debts?

Answer. I never heard him tell them so.

Question. Did you hear Governor Ramsey tell the chiefs that he would not release their prisoners until they signed a paper?

Answer. I never did.

Question. Was the seventy thousand dollars paid by Governor Ramsey to the traders sufficient to pay the amount due to them from the Indians?

Answer. No.

Question. Were you present at the "agency office" when a paper which had been drawn up to Mr. Sweetser was destroyed?

Answer. The Indians came into council, a large number of them, and a large number of chiefs, and some half-breeds, and Mr. Sweetser. The Indians then handed to agent McLean a paper, and said they wished the provisions of that paper carried out. The agent read the paper and I explained it to the Indians. I told the Indians that it was for the whole of their "hand money" to be paid over to their half-breeds. The agent then asked if that was their wish, and they made no reply. One of the Indians then asked me to let him take the paper and he tore it to pieces. Mr. Sweetser's name was not in that paper. After this a general confusion ensued. The Indians denied having signed a paper to that effect. Mr. Sweetser then accused me of not having properly interpreted the paper. I told him that I had. He said that I had not, and that he would handle me without gloves for having done so. Mr. Sweetser then stated that there was something else on the paper that I had not interpreted. He said that the words omitted (were) "*and for other purposes*;" and that they were on that paper. I said that I did not see any such sentence on the paper. After this Mr. Pettijohn and Alexis Bailey gathered up the fragments and copied the paper, and they found that something had been scratched off. This scratching off we supposed to be the words "and for other purposes." Mr. Sweetser then said that he did not know that any person had scratched anything off.

Question. Did W. H. Randall have any license to trade with the Indians since 1837?

Answer. I have no recollection of any, and find no such license recorded on the books.

Question. Did you know of any person who was trading for him with the Indians?

Answer. There was a young man at "Little Rapids" trading for him. I cannot say whether he was a clerk or a trader.

Question. In what county was he located?

Answer. In the Wah-pa-toan country.

Question. Is the list of "traders" certified to by you on pages 34 and 35, Senate document 29, the one you furnished to Governor Ramsey?

Answer. It is. That is my certificate appended to it.

Question. From your long acquaintance with Indians, what is your opinion of Indian testimony, whether on oath or not, when they consider themselves interested directly or indirectly?

Answer. I have never known but two or three instances where Indians have been sworn like white men; and I am not willing to state as to their veracity in such cases. If I had any business of importance at stake I would not like to trust it in their hands under such circumstances.

Re-examined by government commissioners.

Question. Would you like to trust white men under such circumstances?

Answer. No; I would not like to trust either under such circumstances.

Question. Do you know of your own knowledge that the Indians were justly indebted to any one but yourself?

Answer. I have seen no accounts but my own.

Question. What did Major McLean say was in that paper about which you and Mr. Sweetser had the difficulty?

Answer. He did not say.

Question. Was Mr. Sweetser's name in that paper?

Answer. It was not. I do not mean to say that the paper was executed to him. I think I interpreted it correctly.

Question. Were the amendments to the treaty, and the power of attorney to Governor Ramsey, both signed at Governor Ramsey's house, and at the same time?

Answer. They were.

Question. Where were the councils held with the Indians when this power of attorney you have spoken of was agreed upon?

Answer. At the large brick building where Mr. Henry M. Rice had a store. It was explained to them there by Mr. Henry M. Rice and Major McLean.

Question. Had No-hope-ton and Wah-na-ta bands of followers, and were they considered as chiefs prior to the payment at Traverse des Sioux?

Answer. I do not know.

Question. How long have you known No-hope-ton and Wah-na-ta as chiefs?

Answer. Since last winter.

Question. What do you think of the distribution as made on the "Trader's Paper?"

Answer. I think, so far as I am acquainted with the traders' claims, that it is a tolerable fair distribution. I think that Mr. H. H. Sibley has gotten too much.

THEOPHILE BRUGUIER, sworn and examined as a witness.

Question. Do you reside among the See-see-toan bands of Sioux Indians?

Answer. Yes ; and the Wah-pa-toans also.

Question. How long, and where ?

Answer. About eighteen years, on the Missouri river.

Question. Do you know who are recognised as the chiefs of those bands ?

Answer. Yes ; I know them as I have learned from the Indians. There are *seven* chiefs of these bands—*four* See-see-toan, and *three* Wah-pa-toan.

Question. Who are the chiefs of the See-see-toan and Wah-pa-toan bands of *upper* Sioux Indians ?

Answer. Wah-nok-soon-ta, or the Little Rapids Chief ; Mah-zah-shah, or Red Iron ; Ish-tah-hum-bah, or Sleepy Eyes ; E-tay-wah-ke-an, or Limping Devil ; Opee-en-dah, or Big Curley Head ; E-yang-mo-nee, or Running Walker ; and Wah-min-da-ne-chah, or the Orphan. These are all the chiefs of these bands—being *seven* in all.

Question. Look at the receipt of the See-see-toan and Wah-pa-toan chiefs to Governor Ramsey for two hundred and fifty thousand dollars on page 7, Senate document 29, part 2, and say of those who signed it which are chiefs ?

Answer. E-tay-wah-ke-an, or Limping Devil, and Wah-nok-soon-ta, or the Little Rapids chiefs, are all the chiefs on that paper that I know ; and I know all the chiefs of these bands. No-hope-ton is not a chief. Wah-na-ta is a Yankton Sioux, and is not a chief. I have been trading, and hunting, and farming among them for eighteen years on my own account. I know none of the names on that paper but *four*. The two first are chiefs ; and I know Wah-na-ta and No-hope-ton. I have only known Wah-na-ta since last summer. I did not know Wah-na-ta's father or mother. I know Wah-na-ta as *well* among the Indians as white men.

Question. From your knowledge of the Indian character, are they, when they appeal to the Great Spirit for the truth of what they say, to be believed as readily as other persons ordinarily ?

Answer. I answer, yes, that they are.

Question. Do you trade with the Indians ?

Answer. I do.

Question. Have you any claim against them ?

Answer. No ; they pay me in furs ; and the amount of furs I get from them pays all their debts ; and their oath, I say, is just as good as that of white men when no hope of gain is set before them.

Question. Would you prefer the testimony of Indians to that of white men ?

Answer. I do not know.

Question. What amount of sales do you make yearly with the Indians ?

Answer. About fifteen hundred dollars.

Question. How many Indians are in the bands with which you trade ?

Answer. From three to six hundred.

Question. Are there any traders near to your trading house ?

Answer. Yes ; but I get the most of their furs.

NATHANIEL McLEAN, late agent for the Sioux Indians of the Upper Mississippi and Minnesota rivers, sworn and examined as a witness.

Question. Were you the late agent of the Sioux Indians?

Answer. Yes.

Question. Were you the Sioux agent at the time Governor Ramsey and Luke Lea made treaties with the Sioux Indians in July and August, 1851?

Answer. Yes.

Question. Were you present at the making of these treaties?

Answer. I was at Mendota, and also one day at Traverse des Sioux, I think.

Question. Were you at Traverse des Sioux when the treaty was signed by the Indians?

Answer. Yes.

Question. Did you see them sign any other paper at that time?

Answer. Yes.

Question. What was that other paper?

Answer. I cast my eye over it, and found it purported to be an arrangement for the payment of their debts to the traders. The printed copy now shown to me, on Senate document No. 29, part 2, page 22, is correct according to my present recollection. It is substantially a correct copy of the "paper" signed by the Indians. My certificate is attached to the schedule annexed to the paper signed by the Indians. But when I put my certificate to it, I did not see any schedule of creditors' names and amounts attached, nor was there any when the Indians signed it, that I saw. I should have seen it if it had been attached to the same paper which was signed by the Indians. I never saw the schedule until near six months afterwards.

Question. Please examine the printed copy of the report made by you on pages 20, 21, and 22, Senate document, No. 29 part 1, and say whether the facts as therein stated are true.

Answer. I have examined the report made by me, as alluded to, and *now say* that the facts as therein stated are true.

MINNESOTA SUPERINTENDENCY,

St. Paul, January 2, 1852.

SIR: I have the honor to transmit you a letter from agent McLean, enclosing a report of a talk held with certain chiefs and braves of the See-see-toan and Wah-pa-toan bands of Sioux in regard to the disposition of the cash payment of \$275,000 provided by the treaty of Traverse des Sioux.

As you were present, as well as myself, at the treaty in question, I deem it unnecessary to make any comment upon the agent's report.

Very respectfully, your obedient servant,

ALEXANDER RAMSEY.

To Hon. LUKE LEE,
Commissioner of Indian Affairs, Washington, D. C.

INDIAN AGENCY,
St. Peter's, December 13, 1853.

SIR: I have the honor herewith to enclose a letter to the Commissioner of Indian Affairs, in relation to a council held with some of the chiefs and braves of the See-see-toan and Wah-pa-toan bands of Sioux, parties to the treaty at Traverse des Sioux, in relation to signing a paper at the time of said treaty in relation to paying their traders, and with which they are dissatisfied. The letter is intended to be transmitted to the President, through the Commissioner of Indian Affairs.

Very respectfully, your obedient servant,

NATHANIEL McLEAN.

To His Excellency ALEXANDER RAMSEY,
Superintendent Indian Affairs, St. Paul, Minnesota Territory.

INDIAN AGENCY,
St. Peter's, December 13, 1851.

SIR: I deem it my duty to report, for the information of the department, a talk, or council, held with a party of the See-see-toan and Wah-pa-toan bands of the Da-ko-ta or Sioux tribe of Indians, parties to the treaty of the 23d July, 1851, at Traverse des Sioux, numbering twenty-one names in the enclosed abstract, which I consider a part of this report, on the 6th and 8th instant.

The names upon this abstract are a large moiety, if not a majority, of the chiefs and braves of the two bands above named, and they consider themselves authorized to do national business. They came, as they stated, not only to represent their own wishes, but that of their people *en masse* at home.

They state to me, in open council, that they were much dissatisfied with a part of the proceedings at the treaty at Traverse des Sioux. So far as regards selling their country, and the amount stipulated to be paid them by the government, they were satisfied, and hoped it would be carried out in good faith.

They represented that they had subscribed a paper, at the same time the treaty was signed. (as they since have learned,) transferring, in a payment of a debt to a portion of their traders, a large amount of money, more than four fifths of the \$275,000 allowed them by the treaty stipulations, to be paid to them, so soon as they remove to their new homes, in order to enable them to settle up their business, and meet the expenses of their removal and their subsistence for one year.

They wished me to represent to their great father, the President, at Washington, that they solemnly protested against carrying out the conditions of this "paper," purporting to be a transfer of money to pay the traders, inasmuch as their signatures to the paper were obtained by deceit and fraud; that such a paper as they learned they have signed was not read to them and explained at the time, nor at any other time previously; that when they signed this paper, being at the same time they were signing all the papers of the treaty, they thought it was a part or parcel of the treaty itself. It is their earnest wish (that is, if the treaty should be ratified) that the money due, or stipulated to be

paid to them, should come directly into their own hands from the government; that they owe no such sums of money to the individual traders as they learn have been transferred to them by this instrument of writing, and on behalf of their people and themselves protest against its payment; that they never would have signed this agreement had they understood its contents. They allege they are willing to pay their just and honest debts, upon a proper investigation of the accounts, when they obtain the money from the government; they are entirely opposed to paying out their money in bulk to the individuals named in said instrument, excluding all other creditors.

The Indians expressed a desire to see their superintendent (Governor Ramsey) and talk with him upon the subject, particularly as he was one of the commissioners who signed the treaty in behalf of the United States. On the 8th instant a council was held with them in the governor's room at St. Paul, when they, in "open council," (all whose names are contained in the enclosed abstract,) stated to his excellency, in my presence, the substance of what I have related in relation to the treaty and the paper said to be an agreement with their traders to pay their debts; that they had been deceived in signing that paper, as it had never been explained to them, and protested against its being carried out, and wished us to send their requests to their "great father" at Washington; that their father would send them the money according to the stipulations of the treaty, in order that they might settle their accounts according to justice, and for their subsistence and removal.

The governor read and explained to them the articles of the treaty, that part particularly which relates to the payment of the \$275,000, to enable them to settle their accounts, subsistence the first year after their removal, and expenses of their transportation to their new homes. He said to them the language was specific, to be paid to the chiefs and braves of the tribe in such manner as they in "open council" should determine, in order to enable them to settle up their business, subsist themselves for one year, and their expenses of removal. Thus the government would carry out the stipulations of the treaty, without reference to any agreement or contract, with traders or others, which they have made or may make; that the money would be paid to the chiefs and braves, and it was for them to dispose of it as they think proper; that the paper to which they alluded was no part of the treaty; that the commissioners had no power, and assumed none, in relation to the payments to their traders; that was a matter entirely between themselves, over which the commissioners would exercise no control; that the agent would make known their wishes to their great father, the President, at Washington, through the regular officers of the Indian Department; that it was their duty, in all cases of complaint or supposed wrong, to apply to the regular officers whom the government have appointed to attend to their business.

The council terminated and the Indians dispersed apparently satisfied. The explanations and advice to them by the superintendent, I think, were satisfactory to the Indians, and in accordance with my views expressed to them. Some of these Indians had travelled from Lake Traverse, two hundred and fifty miles, others from Lac qui Parle, two hundred miles, and appeared very determined in opposition to the

paper they were induced to sign, transferring their money to the traders. On being again and again questioned by me in relation to it, they collectively and individually affirmed that it was not explained to them at the time the signatures were obtained, nor at any other time, and alleged that they were instructed to make this declaration on behalf of their people at home as well as themselves; that all the See-see-toan and Wah-pa-toan bands, who alone are interested in the treaty at Traverse des Sioux, wish the \$275,000 in the treaty stipulations to be paid to them, to be disbursed as may seem to themselves just and proper when the money is received.

Very respectfully, your obedient servant,

NATHANIEL McLEAN,
Indian Agent.

To Hon. LUKE LEA,
Commissioner Indian Affairs, Washington, D. C.

ABSTRACT A.

Abstract list of Indian chiefs and braves of the Wahpatoan and Some tribes of Dakota or Sioux Indians, protesting against a certain money being paid to the Indian traders, as set apart in the treaty of Traverse des Sioux, July 23, 1851, for the removal of the Indians, to settle their affairs, and to support them one year after they shall arrive at new homes.

Names.	Chiefs.	Braves.	No. who signed the treaty.	No. who did not sign the treaty.
1. Ish-ta-hum-bah.....	1		1	
2. E-yang-mo-nee.....	1		1	
3. Mah-zah-shah.....	1		1	
4. Wah-nok-soon-ta.....	1		1	
5. Mock-poe-we-chas-tah.....		1		1
6. Wam-du-nah-hoto-monee.....		1		1
7. Yah-zoe-ah-pee.....		1	1	
8. Eta-sha-ku-a.....		1		1
9. Wam-du-o-kee.....		1	1	
10. Tah-hum-pu-hen-dah.....		1	1	
11. E-tah-cho-kah.....		1	1	
12. Mo-zah-koo-ta-mo-nee.....		1	1	
13. Tah-ko-ga.....		1	1	
14. E-chah-schun-schun-mo-nee.....		1	1	
15. A-nah-wang-mo-nee.....		1	1	
16. Tah-to-a-yah.....		1	1	
17. Tah-wah-shu-chah-o-tah.....		1	1	
18. Wi-chah-u-zah.....		1	1	
19. Ah-o-kus-sin.....		1		1
20. Wahk-pu-shaw.....		1		1
21. Chan-ta.....		1		1
Total.....			15	6

Fifteen of the above signers signed the treaty at Traverse des Sioux and six of the above signers did not sign the treaty at Traverse des Sioux, being absent, but are parties to the treaty as above named.

I certify, on honor, that the above is a correct list of the signers to the protest.

P. PRESCOTT,
Superintendent of farming, and acting interpreter in this case.

Question. Was that "Traders' Paper" explained to the Indians before they signed it?

Answer. Not to my knowledge. It was not, in my presence.

Question. Were you asked to sign it as a witness?

Answer. I do not recollect that I was.

Question. Did you have any conversation with Governor Ranney about this "Traders' Paper?"

Answer. A certificate had been drawn up by some one (I do not know by whom) for me to sign. I examined it, and did not sign it.

exactly in accordance with the facts. The certificate went on to say "that the paper was explained to the Indians," and I could not sign it. Before I did sign it, I had a conversation with Luke Lea, and afterwards with Governor Ramsey, and I said to Governor Ramsey that the paper had not been explained to the Indians in my presence, and stated my embarrassment in signing a general certificate of that kind; that if I signed it, I would have to say that it was not explained in my presence to the Indians. When it was being signed, I asked Mr. Joseph R. Brown if he was not going to have that paper read and explained to the Indians? Mr. Brown replied that it had been read to them, and that it had been attended to before. This conversation with Governor Ramsey took place at Mendota.

Question. What did Governor Ramsey say in reply to you when you made objection to the certificate which had been prepared for you to sign to the "Traders' Paper?"

Answer. Governor Ramsey suggested that my objection was correct; and that it would be proper to make the certificate in the form in which it is made on page 25, Senate document No. 29, part 1, (as heretofore copied.)

Question. Who presented that certificate for your signature?

Answer. I think it was some of the traders.

Question. Who had the "annuity money" in possession which was due to the See-see-toan and Wah-pa-toan bands of Indians?

Answer. Governor Ramsey brought it from Washington, as I understood.

Question. When and where did he deliver it over to you as the agent?

Answer. It was delivered to me by Governor Ramsey at Traverse des Sioux, and I commenced paying it out the next day. It must have been in December, 1852, when Governor Ramsey paid it over to me.

Question. Did you call on Governor Ramsey for the "annuity money?"

Answer. I frequently asked him when we would commence paying it. He said the money would be ready by the time the rolls were made out. There appeared to be some delay in handing over the money and getting the receipts.

Question. What receipts do you mean?

Answer. I do not know what his business specially was; I was not in the council about that matter.

Question. Was the receipt you allude to, dated November 29, 1852, to Governor Ramsey for two hundred and fifty thousand dollars under the treaty of the 23d July, 1851, signed by the Indians before or after you received the "annuity money" from Governor Ramsey?

Answer. I see both receipts bear the same date. I did not see the receipt signed. I had not asked for the money on that day.

Question. How long had you been ready for the payment to the Indians before their annuity money was handed over to you by Governor Ramsey?

Answer. We were very little detained after the *rolls* were ready.

Question. Why did you not pay the annuity money to the lower bands of Indians before?

Answer. Because I did not wish to assemble the Indians twice.

Question. Did Governor Ramsey say to you *not* to pay the annuity money until he got ready?

Answer. We were waiting and had made the estimates. I do not think that he did, *in that way*. The Indians became impatient and asked me to request Governor Ramsey to let them have their *old* "annuity money," and to let the *new* all pass over, as they wanted to get off on their hunts; that they would take their goods and provisions under the *old* treaty of 1837, and, as there was trouble about the *new* treaty money, they would let the *new* pass. I came, or started, to St. Paul, and was informed that they had agreed upon matters, and that they would all be ready in a short time.

Question. How long were the Indians at the "agency" waiting for their annuity of goods, money, and provisions, before they received them?

Answer. I do not know as to dates, but I think two or three weeks.

Question. Were any provisions issued to them during that time?

Answer. I think not much. I do not recollect that I issued any.

Question. How long had you received the "annuity money" of the *lower* bands, under the treaty of 1837, before Governor Ramsey came with the money under the new treaty of 1851?

Answer. I think about a week or ten days.

Question. Did the Indians request you to pay them their "annuities" under the treaty of 1837?

Answer. Yes, they did; just before the time arrived when we did pay; and before I said that I would make that request of Governor Ramsey.

Question. You state in your certificate to the power of attorney which was given to Governor Ramsey by the chiefs and headmen of the See-see-toan and Wah-pa-toan bands of Sioux Indians, signed September 8, 1852, authorizing and requesting him to demand and receipt for the sum of two hundred and seventy-five thousand dollars, due to them under the *first* clause of the 4th article of the treaty of July 23, 1851, that said power of attorney was fully explained to the Indians before they signed it. Now, will you please say whether you explained to them that this power of attorney to Governor Ramsey revoked and annulled all other and former powers of attorney executed or given by them in reference to the receipt or collection of the said sum of two hundred and seventy-five thousand dollars, or any part thereof; and more especially, whether you explained to them that it revoked the power of attorney signed by them at Traverse des Sioux, July 23, 1851, generally called, in the course of this examination, the "*Traders' Paper*?"

Answer. The Indians had been in council at Henry M. Rice's house or store, with Mr. Rice and others, in getting them to sign the amendments to the treaty. The power of attorney to Governor Ramsey was then explained by Mr. Prescott, the interpreter, in the language of the paper as it reads. I then made a speech to the Indians, and told them that "*it revoked all other powers before given by them.*" Mr. Henry M. Rice then explained it to them, saying that it "*broke* (using the word '*broke*') all former papers made by them." The Indians seemed anxious to get clear of any and all former papers which they had

signed. They spoke of a number of papers which they had signed, and Mr. Sweetser's paper among them, and wanted all of them swept off. After the Indians had concluded to sign the amendments to the treaty, and this power of attorney to Governor Ramsey, we then went to Governor Ramsey's office.

The papers were taken there, and the Indians made speeches to Governor Ramsey. They said to Governor Ramsey that they had come to sign the papers. That one paper (the power of attorney) was to *break* all former papers made by them; and that they wanted him (Governor Ramsey) to bring the money to them on this paper. This last named power of attorney having been before fully explained to them, both the papers were then signed by the Indians.

NATHANIEL McLEAN, cross-examined by Governor Ramsey's counsel.

Question. See the original paper, (here shown,) and say if your certificate to it is genuine, and whether the statement of facts therein contained, are true?

Answer. I answer in the affirmative. The original is the same as the copy that is printed.

The following is a copy of the power of attorney referred to by the witnesses :

Whereas, by the 4th article of the treaty made and concluded at Traverse des Sioux, on the 23d day of July, 1851, between the United States, by Luke Lea, commissioner of Indian affairs, and Alexander Ramsey, governor and ex-officio superintendent of Indian affairs, commissioners on the part of the United States, and the chiefs and headmen of the See-see-toan and Wah-pa-toan bands of Da-ko-ta or Sioux Indians, duly authorized thereto; it was, among other things, provided, that the United States would pay to the chiefs of said bands, to enable them to settle their affairs and comply with their (then) present just engagements, and in consideration of their removing themselves to the country set apart for them by said treaty, and in consideration of their subsisting themselves the first year after their removal, which they agreed to do without further cost to the United States, the sum of two hundred and seventy-five thousand dollars (\$275,000 :) *Provided*, That the said sum should be paid to the said chiefs in such manner as they thereafter in open council should request.

And whereas the said treaty has been approved and ratified by the President and Senate of the United States, with certain amendments added thereto, which amendments have been this day submitted to us by Alexander Ramsey, governor and ex-officio superintendent of Indian affairs, as aforesaid, acting for and on behalf of the United States, and we, the undersigned chiefs of said bands, and duly authorized thereto, have in open council concurred in, consented and agreed to the said amendments: now, therefore, we, the said chiefs, being desirous that the provisions of the said treaty, and especially of the 4th article thereof, should be fully and fairly carried out according to its

just and true intent and spirit, and having full confidence in the discretion and integrity of his excellency Alexander Ramsey, governor and ex-officio superintendent of Indian affairs as aforesaid, do, in open council assembled, by these presents authorize, empower and request him to ask and receive for us, and in our names, the said sum of two hundred and seventy-five thousand dollars (\$275,000;) hereby giving him full power to receipt for the same and execute in our names all necessary vouchers and acquittances therefor. And we do hereby, in open council, authorize and request the proper officer and officers of the United States to pay the said sum to him the said Alexander Ramsey, &c., as aforesaid; and we also authorize, empower and request him to do, or cause to be done, all the acts contemplated by the said 4th article for and by us to be done, to appropriate the said money in accordance with, and for the purpose of carrying out the equitable and true intent thereof; all such acts when done to be final and binding upon us, and to have the same force and effect as if done by us.

And we do hereby revoke and annul all former and other powers of attorney executed or given by us or any of us with reference to the receipt or collection of the said sum of money, or any part thereof.

E-yang-mo-nee, his x mark.

E-tay-wa-kee-an, his x mark.

Ish-tah-hum-bah, his x mark,

(By his nephew.)

Mock-pee-we-chas-ta, his x mark.

Ish-ta-hum-ba-koash-ka, his x mark.

Oo-pee-ya-hen-da-ya, his x mark.

Noan-pa-keen-yan, his x mark.

Wash-tay-da, his x mark.

Hay-a-he-day-ma-za, his x mark,

(By his father.)

Wa-keen-ya-do-tah, his x mark.

A-na-wang-ma-nee, his x mark.

Ink-pa, his x mark,

(By his son.)

Yah-zoo-a-pee, his x mark.

Ta-pe-ha-tank-ka, his x mark.

Wa-mee-dee-o-to-mo-nee, his x mark.

Wah-pee-yanhua-shkan-shkan, his x mark.

No-hope-ton, his x mark.

Wo-to-ne-ho-washta, his x mark.

Moza-hote-ma-ni, his x mark.

Tchun-ka-ha-too, his x mark.

Wah-pah-bah-na, his x mark.

Wah-nipee-dee-doo-tah, his x mark.

Ho-pah-tchoke-ma-zah, his x mark.

Ta-wa-kan-he-day-ma-za, his x mark.

Wa-ka-haw-dee-to-pa, his x mark.

Wah-kah-dee-ka-he, his x mark.

Mah-kah-cen-day, his x mark.

Signed in open council, this 8th day of September, 1852. in presence of—

NATHANIEL McLEAN, *Indian Agent.*

WALLACE B. WHITE, *Secretary.*

PHILANDER PRESCOTT, *Interpreter.*

JOS. LAFRAMBOIS, *Interpreter.*

HENRY M. RICE.

I, Nathaniel McLean, United States Indian agent, do hereby certify, that the foregoing named chiefs and headmen of the See-see-toan and Wah-pa-toan bands of Da-ko-ta or Sioux Indians (now in full and open council assembled, and who constitute and are the proper authorities of said bands, being a majority of the chiefs and headmen, and as such fully competent to transact any and all tribal or national business, for and in behalf of said bands of See-see-toan and Wah-pa-toan Indians,) authorize and request me, as their agent, to state that the annexed and foregoing authority in writing from them was signed and executed by them in good faith, and with a full and complete knowledge of its contents, purport, and meaning, and for the uses and purposes therein named; and, the same having been by me fully explained, they, for themselves and their bands, approve and ratify and confirm the same, and authorize and request me to bear written testimony that the same is their tribal and national act and deed.

NATHANIEL McLEAN,
Indian Agent.

Question. Did you witness that power of attorney made by the Indians to Governor Ramsey, as above copied?

Answer. I did.

Question. Did the same Indians sign both the treaty and the power of attorney?

Answer. I think they did.

Question. Did you ever hear Governor Ramsey say, in any council where you were present, that unless the Indians signed some "paper," that he would not release the Indian prisoners who were confined in the fort?

Answer. I heard no such remark that I recollect.

Question. What has been Governor Ramsey's conduct towards these Indians; has it been mild or otherwise?

Answer. In my judgment his general management of the Indians was good. Prior to this difficulty about these matters I heard of no complaint.

Question. Was not the reason of the payment not having been made before because of your not having the rolls made out?

Answer. I stated before that there was not much delay at Traverse des Sioux under the *upper* treaty with the See-see-toans and Wah-pa-toans.

NATHANIEL McLEAN re-examined by the government commissioners.

Question. What did Governor Ramsey say to the chiefs when they asked him to pay them their money?

Answer. Governor Ramsey said to them that he liked to deal with honest men. That white men paid their honest debts, and that he wanted the Indians to do so also. The Indians asked Governor Ramsey what he thought was right for them to pay. The governor said that he thought seventy thousand dollars. The chiefs refused to pay it, and said that it was too much. Governor Ramsey said: "*If they did not pay their honest debts, that he would take or send the money back to their great father.*" Wa-ba-shaw then replied: "*Take it back, and we will take our lands back.*" The Indians then broke up in confusion.

Question. Did Governor Ramsey say anything about not paying them until they got to their new homes?

Answer. I heard Governor Ramsey say that he was not bound to pay them until they removed to their new homes; but that he would perhaps do so if they were honest men, or words to that effect.

Question by Governor Ramsey's counsel. Did not Governor Ramsey say to them that the government could pay them or not?

Answer. Governor Ramsey said "that he could pay them or not pay them at his discretion," and referred them to the treaty.

—

JOSEPH LAFRAMBOIS, junior, sworn and examined as a witness.

Question. Were you at the payment of the upper bands of Indians at Traverse des Sioux last fall?

Answer. Yes.

Question. Did you see "Limping Devil" sign the receipt to Governor Ramsey for two hundred and fifty thousand dollars?

Answer. No.

Question. Were you present when such a receipt was signed by the Indians?

Answer. I know they signed a paper, but do not know what it was.

Question. Who did you see sign it?

Answer. I did not see any of them sign it.

—

JOSEPH RIENVILLE, sworn and examined as a witness.

Question. Had you a claim on your father's account against the Indians?

Answer. Yes.

Question. How much was it for?

Answer. Seventeen thousand five hundred and forty dollars.

Question. Did you get any of it?

Answer. No.

Question. Why did you not get it?

Answer. I do not know.

Question. Were you entitled to it?

Answer. Yes; I expected to get a part of it, but I do not know how they fixed it.

Question. Did you hear the chiefs demand the two hundred and seventy-five thousand dollars from Governor Ramsey?

Answer. Yes; they asked to have the money in their own hands, and to do as they pleased with it. Governor Ramsey did not say yes or no, so far as I have heard.

Question. Did you sign a power of attorney to Hugh Tyler to draw your money from the Med-a-wa-kan-toan bands of Indians?

Answer. No.

Question. Are you sure of this?

Answer. I am.

Question. Did you have a claim for your father's estate on the Med-a-wa-kan-toan Indians?

Answer. Yes, for two thousand dollars.

Question. Did you get any of it?

Answer. No.

Question. Did you sign any power of attorney?

Answer. I did for my half-breed money of the See-see-toan's and Wah-pa-toan's, and then signed a receipt for it; and that is all I ever signed.

Question. Was this seventeen thousand five hundred and forty dollars ever paid to you?

Answer. No, I suppose it went to pay my father's debts to the American Fur Company; but they did not allow that much to his estate.

Question. Did you get any money on account of your debt against the Med-a-wa-kan-toan Indians?

Answer. No; they promised to allow me one thousand dollars, but I have not received a cent of it as yet.

Question. Did you swear to your account?

Answer. I did not.

Question. Are you sure of that?

Answer. I am sure that I never did.

Cross-examined by Governor Ramsey's counsel.

Question. Who made the demand of Governor Ramsey for the money at Traverse Des Sioux, and who was present on that occasion?

Answer. E-yang-mo-nec or Running Walker asked for it; and Mr. Dousman, Mr. Sweetser, Mr. Sibley, and a good many more were present.

Question. Who paid you your "half-breed" money?

Answer. Mr. Tyler and Mr. Dousman. They paid me eight hundred dollars in paper money, deducting *fifteen* per cent. out of my part of it.

Question. Were you willing to pay that fifteen per cent.?

Answer. No; I was not.

Question. Did you ever agree to pay it?

Answer. No; I did not.

HAZEN MOOERS, sworn and examined as a witness.

Question. Do you know anything about a "half-breed paper," drawn up at Traverse Des Sioux, apportioning the half-breed money of the *upper* bands?

Answer. Yes. I was one that helped to get it up. Mr. Robertson drew up the heading, and I carried it around and got over one hundred half-breeds; I think as many as one hundred and sixty. I presented that paper to Governor Ramsey, and he said that he would do all he could for them.

Question. Did you receive any of that "half-breed" money?"

Answer. No; it appeared that a division had already been made of it, and that it had been assigned to particular persons.

Question. Did any of the half-breeds on that paper get any of the money?

Answer. I think that some of them did; some more, and some less.

Question. Was any of the half-breed money of the See-see-toan and Wah-pa-toan Sioux Indians paid to the Med-a-wa-kan-toan half-breeds?

Answer. Yes; some of it was.

Question. Who made out the half-breed list on which they were paid their money?

Answer. I do not know. I saw but one paid; he got two hundred and fifty dollars. He was paid in paper money, by Hugh Tyler, at Mendota. Governor Ramsey was not present. Mr. Tyler took back the money and said, "Now, John, if you want the gold, I will give it to you," and then gave this half-breed the gold, deducting *fifteen* per cent.

Question. Did you hear the chiefs in open council ask or direct Governor Ramsey how they wanted him to pay the money due to them under the treaty of 1851?

Answer. I did not; I was not present at any council.

Question. Did you see the chiefs of the Med-a-wa-kan-toan bands paid any of this twenty thousand dollars?

Answer. I saw Governor Ramsey come into the "agency," with Hugh Tyler, and have *seven* bags of gold, and hand one bag to each chief.

Question. Was Wa-ba-shaw and Wah-coo-ta there?

Answer. Yes.

Question. Are you certain that all the chiefs received this money?

Answer. I think so; I think they took it into their own hands; but I may be mistaken. It still runs in my head that they were all there.

Here the evidence was closed on the part of the United States, and the witnesses of Governor Ramsey produced, sworn, and examined in support of his defence.

The Hon. HENRY H. SIBLEY, sworn and examined as a witness.

Questions by Governor Ramsey's counsel. Were you at the treaties of Mendota and Traverse des Sioux, in 1851?

Answer. I was.

Question. Were you present at the signing of the treaty at Traverse des Sioux on the 23d of July, 1851?

Answer. Yes.

Question. Was there another paper signed at the same time, and if so, state the character of that paper?

Answer. I have seen the original "*Traders' Paper*," (now shown to me,) and that is the paper which was signed immediately after the signing of the treaty by the Indians.

Question. Was it signed by the chiefs in open council?

Answer. It was signed at the same council with the treaty.

Question. Had it been explained to the Indians before the signing of it?

Answer. It had been explained to a number of the chiefs to my knowledge, and the subject matter of that paper had involved a considerable degree of discussion before the treaty was signed.

Question. Did the Indians go to that council with a full knowledge of what paper they had to sign?

Answer. Some of them did to my knowledge, and most, if not all, of the chiefs went there with a knowledge of what they were to sign.

Question. Go on and state generally what was the understanding of the Indians and the traders about the payment of their debts?

Answer. There were different bands of Indians present, from different portions of the country, and there was a very considerable feeling manifested about their debts and other subject matters of the treaty.

Question. Did the Indians at Traverse des Sioux acknowledge an indebtedness to the traders, and, if so, how much?

Answer. They did acknowledge their indebtedness, but I cannot say how much. They did not name any amount because, there being different traders for the different bands, it was impossible for them to ascertain the amount of their collective indebtedness. The amount they spoke of, as subsequently incorporated into the treaty, was suggested to them by others. The amount was the limit, as it was supposed, the commissioners would pay for their debts, removal, and subsistence.

Question. Was this "*Traders' Paper*" executed in accordance with the proposition of the Indians?

Answer. I have already answered, that some of them knew its contents; and I had reason to believe that the greater part of the chiefs and braves understood it, although the manner in which the sum was to be divided among the claimants was not stated.

Question. Was there a council for the distribution of their "*half-breed money*," and, if so, what took place in that council?

Answer. There was a meeting of all, or of most of their chiefs on the prairie, on the evening of the day on which the treaty was signed. I was sent for by the chiefs and braves to go there. It being dark, I took a candle to enable me to write down what the Indians wanted in

to do. They desired me to write down the names of the "half-breeds" who were to receive or partake of the forty thousand dollars in accordance with their directions. The names of the "half-breeds" were then called out by the chiefs or principal men, and when not objected to, they were put down on the list. The list, so far as I recollect, is substantially the same as that now attached to the "Traders' Paper." There were a few additions made to that list, mainly at the solicitation of the chiefs subsequently, and some slight changes made by Governor Ramsey, as I understood, at the request of some of the chiefs. But the list, as it now stands, is substantially the same as that I made out, as before stated. I wish to state that the names of heads of families were alone put down, and the number in the family specified, except where one individual alone was indicated.

Question. Do you recollect any remarks that were made by either of the chiefs in the council where the "Traders' Paper" was signed, relative to its contents?

Answer. I recollect only one, and that was old "Sleepy Eyes." He said in a speech which he made, that now the traders were paid, he hoped that hereafter they would not charge as much for their *goods* as they had been in the habit of charging for certain articles which he specified. I have an indistinct recollection that the "Orphan" also made allusion to the same subject, but I am not positive on that point. This was at the same council.

Question. From your long intercourse with the Sioux Indians, what reliance would you place upon their evidence when they are interested? and would it make any difference whether they were speaking under oath or not?

Answer. As a general rule, I would attach no weight at all to their testimony where their feelings or interest are involved. There may be solitary exceptions to this general rule, but they are exceedingly rare.

Question. Did Governor Ramsey confederate with you to absorb the whole fund named to favorites, to the exclusion of "meritorious creditors?"

Answer. He did not.

Question. Were you at Traverse des Sioux at a council held before the payment of the "annuities" to the Indians?

Answer. I was present at Traverse des Sioux all the time, but was not at all the councils there held between Governor Ramsey and the Indians.

Question. What was Governor Ramsey's conduct towards the Indians during their stay at Traverse des Sioux? Was it cruel and oppressive, or was it mild and kind?

Answer. I considered it very mild and kind. Some days after our arrival at Traverse des Sioux, other bands of Indians, not residing there, having stated that they were prohibited by Red Iron's and others of another band from coming to see Governor Ramsey in an official capacity, or any other, I suggested to Governor Ramsey that he should cause "Red Iron" to be arrested. He did cause him to be arrested, but not as soon as I thought he should have done. Before he did arrest him, "Red Iron's" men had been guilty of conduct which I considered outrageous, as well towards the other Indians as to the government

authorities. I know that after night Red Iron's men, and some of another band, went about whooping, and yelling, and firing off guns. This was done, in my opinion, to intimidate the other Indians from holding intercourse with Governor Ramsey.

Question. From your long knowledge of the Indians, what is the object of a "soldier's lodge?"

Answer. It is to effect certain objects, so far as I understand, with the "bands" coming from abroad. They recognize the right of "*the band*" living on the land to which they come, to erect a "soldier's lodge," and submit to the regulations prescribed by that "soldier's lodge."

Question. Is not the power of the chiefs so limited that a few of the soldiers can control their action?

Answer. The "soldiers' lodge" controls the movements of the "*whole band*," without reference to the authority of the chiefs. That is the custom among these Indians.

Question. Cannot a few braves compel a chief to renounce his most solemn engagements?

Answer. A few cannot, in opposition to the chief and the rest of the band.

Question. Cannot a few braves, when the chief stands alone, without the help of his other men, compel him to renounce the most solemn engagements?

Answer. I do not know that such a state of things can be. I never knew just such a state of things, and therefore cannot answer.

Question. Do you know the handwriting of Joseph Rienville?

Answer. I do—(here was shown Joseph Rienville's account and affidavit;) and that is Joseph Rienville's handwriting, to the best of my knowledge.

Question. Was the account hereinafter inserted, sworn to by you?

Answer. It was sworn to by me as correct and just, according to the best of my knowledge and belief. The reason why H. L. Dousman and Joseph R. Brown were also sworn to the correctness of the account, was, that the claims embraced therein were extended over a number of years before I came into the country, and H. L. Dousman was better able to testify to their just character than I was, he having been longer than myself engaged in the Indian trade. After I came into the country in 1834, I had charge of the American Fur Company's trade among the Sioux of the St. Peter's. Joseph R. Brown was my clerk for several years, and in charge of the trading post of Lake Traverse and its dependencies. He kept the account books of credits at that post, and made also an abstract of the balances due by the Sioux in the books at that place, for some years previous to his going there. H. L. Dousman was interested, and so were other parties, in the claim or account referred to and made in my name, but J. R. Brown was not interested directly or indirectly. I made oath to the correctness of the account, to the best of my knowledge, from my general acquaintance with the system of trade, and the large amount of capital and heavy losses sustained in the prosecution since I came into the country. I could, of course, know nothing of the delivery of the articles of goods and merchandise embraced in the general account which we delivered

to the Indians, as I did not live with the upper bands; but I again assert my belief, that the sum claimed was really and justly due, from the many years and large capital employed during the period embraced in the account. At the "Doty treaty," so called, made at Traverse des Sioux in 1841, an item of one hundred and fifty thousand dollars was inserted for the payment of debts, upon the express demand of the Indians, which amount was principally due to the "American Fur Company," and those connected with it in the trade. That treaty did not receive the sanction of the Senate, and consequently no part of the debts were paid under it. The traders presented claims under that treaty, much exceeding in amount the one hundred and fifty thousand dollars, which was inserted therein.

Question. Do you know of any person who presented claims which were contracted prior to the treaty of 1851, which were not inserted in that schedule to the Traders' Paper?

Answer. So far as my recollection serves me, every account that was presented was included in that schedule. But I may be mistaken. I wish to state that Mr. Chute, who was part of the time at Traverse des Sioux, asked me if I would favor the claim of Mr. Dickson, or Dixon, who, I think, formerly belonged to the British Indian department for claims, as I understood. Which account of Mr. Dixon accrued shortly after the war of 1812, proposing, if I would do so, to allow me an interest in the claim. I replied, that I did not consider that those claims came within the meaning of the provisions of the treaty; inasmuch as I believed Mr. Dickson, or Dixon, never to have traded under an American license. I do not know that the account was ever presented, and if so, I never saw it. I wish to say, that a claim of Mr. James Wells was placed in my hands, but was omitted to be included in the schedule. An omission for which I had subsequently to pay him a considerable sum for my negligence. I learned that Mrs. Hooe, as representative of the estate of Mr. Rolette, had an account or claim. If so, I never saw it. I desired, in consequence of Mrs. Hooe's relationship to the Indians, as well as from the fact that her father, while living, had been a good friend to the Sioux Indians, to allow her a gratuity of two thousand dollars out of the amount; which proposition was objected to by some other claimants, on the ground that her relationship was with the *lower* Sioux Indians, and I was obliged to abandon it.

Question. Did you ever witness the signing of any receipt to Governor Ramsey by the chiefs of the Sec-see-toan and Wah-pa-toan bands, for two hundred and ten thousand dollars?

Answer. I saw "Limping Devil" sign it. I cannot say that I saw any other chief sign it. I think I signed it as a witness for him.

Question. Were there any means of coercion used by Governor Ramsey to procure the receipt?

Answer. Not to my knowledge; "Limping Devil" came voluntarily and offered to sign it.

Question. Can you explain why some of the chiefs have signed one and do not sign the others?

Answer. Some of the Indians may have been engaged in hunting at the time, who were present at another time.

Question. Do you know the chiefs who signed the treaty at Traverse des Sioux?

Answer. I know some of them.

Question. Was the distribution, as made on that "Traders' Paper," fair and just to the best of your knowledge?

Answer. I believe it was the best division that could have been made under the circumstances. But a number of the claimants at the time, including myself, did think and feel disappointed at the small allowance made them *pro rata* on the amount of their claims.

Question. Were the united debts or claims greater than the amount they received under the "Traders' Paper?"

Answer. There were more than double the amounts on that "Traders' Paper."

Question. If the money had been paid to the Indians in hand, would they have paid their debts with it?

Answer. I think not.

Question. Did the Indians at any council at Traverse des Sioux, Fort Snelling, or Mendota, propose to submit their traders' accounts to arbitrators?

Answer. I never heard the Indians make any such proposition?

Question. In any council when you were present, did the chiefs unanimously demand of Governor Ramsey to have the money paid into their own hands?

Answer. I heard the chiefs at Traverse des Sioux demand to have the money paid into their own hands; but do not know whether it was unanimous or not. I also heard the same demand made at Fort Snelling or Mendota; but this *latter* demand was not unanimous.

Question. What chiefs at Traverse des Sioux made this demand?

Answer. I recollect that "Limping Devil" and "Red Iron" made such a demand; but I do not distinctly recollect that any other chief did so.

Question. In any other council when you were present, either at Mendota or Fort Snelling, or your own house, did you hear Governor Ramsey make the signing of a paper, or a payment of their debts, a condition precedent to the release of their prisoners at the fort?

Answer. I never did. The Indians, four, or five, out of seven chiefs, came and asked me to call on the governor and request him to release the prisoners. I came to St. Paul to see the governor about it, and told him that I never before had asked a personal favor of him, but that I made it a special request that he would release them. He refused, and I returned and gave the message to the Indians. He subsequently told me that he had left the matter in the hands of the Chippewa and Sioux Indian agents. Subsequently to the signing of the receipts by the Indians I renewed my request. The governor, I think, said the agents had come to some arrangement of the matter, and recommended the discharge of the prisoners; and he did release them.

Question. Do you know why the councils were removed from the "agency" to Mendota?

Answer. I cannot state of my own knowledge.

Question. Is the room at Mendota more convenient than the government council house at the agency?

Answer. It is larger.

Question. Was not the great body of the Indians encamped on the Mendota side of the river?

Answer. Yes. They were living on the Mendota side. Two bands only were on the other side of the Mississippi encamped, according to the best of my recollection.

Question. Were the Indians kept drunk at, and during any of the councils at the payment?

Answer. There was no liquor given to them by any one interested in the treaties to my knowledge. There were drunken Indians there on one or two occasions during the pendency of the payment, and I exerted myself to find out who gave or sold them the liquor, but could not.

Question. Did you present an account in your own right for thirty seven thousand dollars against the Med-a-wa-kan-toan tribe; and was that account correct and sworn to by you?

Answer. I did in my own right, and in connexion with others. It was correct and sworn to by me.

Question. Were the debts contracted subsequent to the treaty at Mendota paid?

Answer. They were not paid, except in a few individual instances.

Question. Why were the Indians kept waiting for their payments at Traverse des Sioux?

Answer. My impression is that they were paid as soon as the "payment rolls" were made out. I heard Governor Ramsey ask the agent on one or two occasions if the rolls were made out; when he answered that they were not quite ready. My impression is that they were paid immediately after the rolls were finished.

Question. Do you know at what period the lower bands of Indians commenced collecting at Mendota, or at the "agency."

Answer. I do not.

Question. Had they commenced collecting before Governor Ramsey or agent McLean had arrived at St. Paul with their money?

Answer. There were some Indians collected before the return of these officers; but I cannot say that it was for the purpose of receiving their "annuities."

Question. Were you present at any council held at Traverse des Sioux when Governor Ramsey told the chiefs that he would not pay them their "annuity money" unless they signed a paper?

Answer. No.

Question. Were you present at any council at your own house when Governor Ramsey told the chiefs that he would not pay them their "annuity money" unless they signed a certain paper?

Answer. I was present when Governor Ramsey told them that the money set apart for their debts would not be paid to them under any circumstances, unless they made some arrangement in regard to its disposition, without his specifying any particular mode. Governor Ramsey stated that he was not authorized by his instructions to pay directly into the hands of the Indians the sum of money which had been set apart for specific purposes. That if they could not arrange among

themselves in reference to a proper disposition of it, he would either send the money back, or await further orders from the government.

Question. Is the account now shown to you, amounting to thirty-seven thousand seven hundred and twenty-two dollars and seven cents, the account you presented against the Med-a-wa-kan-toan Sioux Indians ; and was it signed and sworn to by you as correct ?

Answer. It is ; and was signed and sworn to by me, according to the best of my knowledge and belief. I was not present at the delivery of all the articles.

The following is a copy of Mr. Sibley's account referred to as above :

The MED-A-WA-KAN-TOAN bands of Sioux Indians,					Dr.
To. H. H. SIBLEY,					
For balances of credits due in 1837 and 1838, not included in treaty claims of 1837.....					\$5,515 64
For	do	of	do	due in 1839.....	1,646 50
For	do	of	do	due in 1840.....	1,086 98
For	do	of	do	due in 1841.....	3,487 50
For	do	of	do	due in 1842.....	195 50
For	do	of	do	due from 1843 to 1848 inclusive.....	11,487 43
For	do	of	do	due outfits 1849, 1850, and 1851, to date of treaty August 5, 1851.....	8,272 52
For 1,500 traps lost from 1837 to 1851, at \$1 50.....					2,250 00
For work in blacksmith shop for some years—say fourteen years—at \$275 per annum.....					3,780 00
					<hr/> 37,722 07 <hr/>

TERRITORY OF MINNESOTA, }
County of Da-ko-ta, } ss.

Before me, Alexander Ramsey, superintendent of Indian affairs, personally came Henry H. Sibley, who being duly sworn, doth depose and say that the above account is just according to the best of his knowledge and belief ; and that the sum charged has not been heretofore paid by said band, and is honestly due him the said Sibley.

HENRY H. SIBLEY.

Sworn to and subscribed before me at Mendota this 9th December, 1852.

ALEXANDER RAMSEY.

Question. Look at the paper shown to you and say whether you are not a witness to it ; and whether you were present when it was signed by the parties whose names are affixed to it as parties ?

Answer. I was a witness to that paper, and presume all signed it whose names are to it, as I am not in the habit of witnessing papers unless the parties signed them in my presence, or acknowledged them afterwards.

Question. Look at the receipt of the chiefs of the Med-a-wa-kan-

toan bands of Indians, on Senate document No. 29, part 2, pages 17 and 18, and say whether the chiefs, whose names are signed thereto, signed in your presence?

Answer. I saw Tah-o-ah-ta-doo-tah, Tah-chan-koo-wash-tah, Shak-o-pee, and We-chonk-pee sign it; which are the *third, fourth, fifth, and sixth* names as they stand upon the list of signatures consecutively. The first three named are chiefs, and the last is a sub-chief.

Question. Did these chiefs sign in the presence of Governor Ramsey, and voluntarily?

Answer. They signed in Governor Ramsey's presence, and voluntarily.

Question. Was the receipt read and explained to them at the time they signed it, or at any other time?

Answer. It was read and explained to them at the time they signed it.

Question. Did the Indians acknowledge the sum mentioned in this receipt as the amount to be paid to their traders?

Answer. They always did acknowledge it, so far as I know, subsequent to the making of the treaty up to a short time before the payment.

Question. Do you know of your own personal knowledge why the twenty thousand dollars, part of the ninety thousand dollars mentioned in the receipt, was paid to the Med-a-wa-kan-toan chiefs?

Answer. I do. That sum was originally intended by the claimants to be relinquished to the half-breeds or mixed bloods, inasmuch as the commissioners had refused to make any provision for that class of persons under the treaty. The half-breeds subsequently, or a majority of them, took ground against the claimants, which caused the claimants to request that the money might be paid back to the Indians, they (the traders) having relinquished their claim to it, although justly due to them.

Question. Did Governor Ramsey give this twenty thousand dollars to the Indians for any other purpose than that mentioned by you?

Answer. Not that I know of.

Question. Did the chiefs of the Med-a-wa-kan-toan bands get together at any time after the treaty and acknowledge their indebtedness to the traders; and if so, to what amount?

Answer. They did. They acknowledged about one hundred and thirty-six thousand dollars to be due to their traders. The way they ascertained that particular sum was at a council held with the traders on the evening of the day on which the treaty was held, at which a large number of whites and Indians were present, when the individual chiefs or soldiers designated the different persons whom they wished to be paid, with the amount; the aggregate of which was about equal to the sum specified.

Question. Was the aggregate amount of the claims of the licensed traders more than the amounts received by them?

Answer. It was considerably more. My own account was thirty-seven thousand seven hundred and twenty-two dollars, out of which I received *pro rata* less than twenty thousand dollars, according to the best of my recollection.

The Hon. HENRY H. SIBLEY cross-examined by the government commissioners.

Question. Was the "Traders' Paper" (so called) explained to the Indians in open council when they signed it?

Answer. It was not.

Question. How long afterwards was it before the schedule was attached?

Answer. It was attached on the same evening, I think, on which it was signed. The reason why it was not before attached was that the Indians from the beginning designated certain individuals, not then engaged in the trade, whose claims they were unwilling to pay; and the traders in the country, considering that these debts were to a certain extent just, did not think it right that these persons should be wholly excluded. They therefore proposed to the Indians that the sum set apart should be left to be disposed of among the traders, or by the claimants themselves, as they might think proper; and a committee was then appointed by the claimants to adjust a *pro rata* proportion to each individual. I being the largest claimant, although solicited to be one of the committee, refused. The committee was composed of one individual connected with the American Fur Company, and of two others not connected with them; which was done with a view to give general satisfaction to the claimants, no one's interest being unduly represented.

Question. Were any books and bills of particulars exhibited to that committee for consideration and adjustment?

Answer. Not to my knowledge, although there were books in the possession of some of the claimants then on the ground.

Question. How many years back did these claims and accounts of the traders extend?

Answer. I think that the furthest went back to the year 1820, or about that time.

Question. Were the sums apportioned by this committee of traders submitted to the chiefs for their approval afterwards?

Answer. I do not know that they were. Some of the chiefs, I think, were told the contents of the paper.

Question. When was Major McLean's certificate attached to that Traders' Paper?

Answer. I do not recollect the precise date.

Question. Was it attached at Traverse des Sioux?

Answer. I am unable to answer. My impression is that the certificate was written at Traverse des Sioux.

Question. Who prepared that certificate?

Answer. I do not know, but my belief is that he prepared it himself.

Question. Do you know of another certificate being prepared for him to sign also?

Answer. I do.

Question. Did he sign the one prepared for him?

Answer. He did not. The certificate attached to the paper was not satisfactory to a majority of the claimants. It was not such a certifi-

cate as they thought it was incumbent upon the agent to attach to that paper.

Question. Did the committee make out the amount that each claimant was entitled to, or was it made out for them by others?

Answer. I have no reason to believe that it was made out by others than the committee.

Question. Could all the persons composing that committee read and write?

Answer. Two out of three could; the other could not.

Question. Were you present when the See-see-toans and Wah-pa-toans signed the receipt to Governor Ramsey for two hundred and fifty thousand dollars (\$250,000)?

Answer. I was present when one signed it.

Question. Did the chiefs generally refuse to sign it?

Answer. They did at first—or, rather, some of them did.

Question. Did Governor Ramsey ask you to help him to get the receipts from the Indians?

Answer. He did. I said to Governor Ramsey, that I did not consider that there was any necessity for it; that the paper already signed by them authorized him to make the payment without any further *authority*, as the amount involved was invested in the claimants or traders.

Question. Did you help him to get their names to these receipts?

Answer. I did.

Question. Was your action in the matter with his knowledge and consent?

Answer. I have no reason to believe that Governor Ramsey knew what I was doing, except that he knew I was exerting myself to get these receipts, because I had reason to believe that he would not pay the amount of these claims unless he did get them.

Question. Did you inform Governor Ramsey what means you used to get these receipts signed?

Answer. I may have informed him of some of my movements; but I certainly did not inform him of all the means I used for that purpose.

Question. Did Governor Ramsey know that you had offered them rewards to sign these receipts?

Answer. I think it is probable that I did mention something of that kind to Governor Ramsey, but I am not positive. I did not think it necessary to tell Governor Ramsey what means I was using to bring about my own ends.

Question. Did not Governor Ramsey tell all you traders that he would not pay the claimants unless he got his vouchers signed by the Indians?

Answer. I do not know of his having said so; but he did state, frequently, that it was necessary for him to have that paper for his own protection.

Question. Did you, by yourself, or through others, offer any Indian or Indians any money, goods, or other property, to sign that receipt to Governor Ramsey?

This question was objected to by Governor Ramsey's counsel.

Answer. The witness declines to answer this question, unless he is

permitted to go behind the treaty, and give a full history of his whole conduct in the matter. (Meaning the *Mendota treaty*, of the 5th of August, 1851.)

Question. Were you authorized by the Wah-pa-coo-ta Indian creditors to receive from Governor Ramsey the sum of (\$90,000) ninety thousand dollars?

Answer. I was, from all but one, and he was not present, and could not be found. He had a small claim of (\$500) five hundred dollars, which, however, was all satisfactorily arranged afterwards.

Question. Did Governor Ramsey pay you that money, the (\$90,000) ninety thousand dollars, on that order, or power of attorney?

Answer. He did.

Question. In what kind of funds did he pay you?

Answer. He paid me in a draft on the Merchants' Bank of New York, I think; I am not positive, however, as I had other checks on some other banks.

Question. Did you take out of these traders' claims, so paid by you out of the money received from Governor Ramsey, "*ten per cent.*"?

Answer. I did.

Question. To whom did you pay this "*ten per cent.*"?

Answer. To Hugh Tyler.

Question. Why was that "*ten*" per cent. paid to you for Hugh Tyler on this Wah-pa-coo-ta fund of ninety thousand dollars?

Answer. Because the claimants chose to pay it.

Question. Did the Wah-pa-coo-ta Indians ever object to the payment of this money to their traders?

Answer. Never, to my knowledge. On the contrary, they were anxious to pay it.

Question. Why, then, did it become necessary to make their creditors pay this "*ten*" per cent. to an agent?

Answer. The arrangement with Hugh Tyler included all these claims. This Wah-pa-coo-ta fund as well as others.

Question. For what purpose was this per centage used?

Answer. It was to compensate Hugh Tyler for devoting his time to the ratification of the treaties of 1851, and to secure the claims of the creditors under the different treaties.

Question. Was any of this fund paid to any body else to assist in the same objects, as well as to Hugh Tyler?

Answer. Yes, there was.

Question. Did Governor Ramsey know that this per centage was to be paid to any one besides Hugh Tyler?

Answer. I have reason to believe that he did know that some portion was to be so paid, but I am not positive.

Question. How much of this per centage was paid out for services to others in this (Minnesota) Territory?

Answer. After the conclusion of the treaty at Traverse des Sioux, at a meeting of the claimants under that treaty, it was suggested that some expense would necessarily be incurred in securing the rights of the claimants under it. I was entrusted with the management of the affairs of the claimants, so far as was necessary to secure these rights. I think that Mr. Alexis Bailey was one of the dissentients. Being dis-

satisfied with the amount allowed to him, he stated that he would not be willing to pay any portion of the expense that might be incurred. That, inasmuch as the claimants under the "*lower*" treaty at Mendota constituted a majority of the claimants under the "*upper*" treaty at Traverse des Sioux, it was understood that this arrangement included *both* treaties. I mean as to leaving the matter in my hands.

When the amount of the expenses incurred for the payment of agents and attorneys was aggregated, it was found that the amount on the "*upper*," and a portion of the "*lower*" treaty, would considerably exceed the sum of "ten" per cent. I think under the "*upper*" treaty, it was fifteen per cent; and under the Med-a-wa-kan-toan treaty, eighteen per cent. I was unwilling to present the amount of eighteen per cent. to the claimants, and paid all but "*fifteen*" per cent. of it myself, under the Med-a-wa-kan-toan portion of it. There was only "*ten*" per cent. under the Wah-pa-coo-ta part. "*Ten*" per cent. of that amount was paid to Hugh Tyler, and five per cent. to other persons. I cannot state the precise amount, a large majority of the claimants paid "*fifteen*" per cent.

Question. Do you know whether Hugh Tyler has deposited forty thousand dollars (\$40,000,) or more, in any one or more banks in any of the United States?

Answer. I do not know.

Question. Have you ever made any estimate of the aggregate amount of per centage paid to Hugh Tyler; and was not the amount received by him greatly beyond the value of any services rendered by him, or which could have been rendered for the claimants under these treaties?

Answer. I have not made any estimate of the aggregate amount paid to Hugh Tyler, and do not think the sum paid to him exceeded the value of his services, under all the circumstances.

Question. Did you inform certain claimants that unless they gave this per centage, and thereby procure this money immediately, that it might be stopped by order of the general government; or words to that effect?

Answer. I did, in reference to the Wah-pa-coo-ta fund. I thought that the matter should be brought to a close as soon as possible. That the money might be stopped through the influence of certain persons with the government at Washington.

Question. Was this before you received the order from the Wah-pa-coo-ta claimants to Governor Ramsey for the ninety thousand dollars. (\$90,000?)

Answer. It was.

Question. From whom did you obtain such information?

Answer. I did not get it from anybody. It was my own suggestion.

Question. Had you any assurances from Governor Ramsey, before he left St. Paul for Washington city to bring this money on, that the traders should be paid, and that the money should not go into the hands of the Indians in the first instance?

Answer. I had not. I, from the beginning, held Governor Ramsey morally responsible that he would carry out what he knew, as com-

Commissioner, had been the arrangement or agreement with the Indians for the payment of their debts.

Question. When did Governor Ramsey determine to pay the traders, and not to pay the money to the Indians directly?

Answer. I cannot give a positive answer to that question.

Question. Who was to pay the expense of collecting the Indians at Traverse des Sioux, in order to secure your claims against them?

Answer. I do not know that the Indians were ever collected at Traverse des Sioux for the purpose of securing our claims.

Question. Who supplied the Indians with provisions at Traverse des Sioux before the payment?

Answer. I gave them some, and I think Governor Ramsey gave them some also, and perhaps some others.

Question. Do you know directly or indirectly, from sources of information that you believe, whether any general government officer, or Governor Ramsey, was offered, or received, or is to receive, any part of the money arising from this per centage on claimants?

Answer. So far as Governor Ramsey is concerned, I have no knowledge or information which leads me to believe that he has ever received one cent of this money, or that he is to get, or will ever receive, any part of it. *I decline to answer as to other public officers.* I will state, however, that I know nothing positive of my own knowledge.

Question. Did Governor Ramsey ask you to assist him in getting the receipt from the Med-a-wa-kan-toan chiefs for the ninety thousand dollars.

Answer. I do not recollect that he did. But I exerted myself to get those receipts, because there was no previous obligation of the Med-a-wa-kan-toan Indians to pay their debts as there was at Traverse des Sioux.

Question. Were you present when Wa-ba-shaw and Wah-coo-ta signed that receipt for the ninety thousand dollars?

Answer. I was not present.

Question. See the receipt on Senate document No. 29, part 2, and page 10, signed by Frederick B. Sibley, for (\$2,520 12) twenty-five hundred and twenty dollars and twelve cents, and say in what kind of funds it was paid to him.

Answer. My impression is that it was paid to me by Governor Ramsey in a draft on some bank in New York, but on what bank I do not now recollect. The draft was at my own request.

Question. What amount of paper money or bank notes did Governor Ramsey bring here to St. Paul of the Sioux money under both of the treaties?

Answer. I am unable to state what amount of paper money was brought here by him.

Question. In what kind of funds was the two hundred and fifty thousand dollars (250,000) paid to Hugh Tyler by Governor Ramsey?

Answer. Some was paid in drafts on New York, some in paper money or bank notes, and some in gold.

Question. How much in gold?

Answer. I have no recollection of the amount.

Question. Did the "half-breeds" pay this "fifteen" per centage when they received *their* part of the money?

Answer. They did; the greater part of them. I do not know whether all did or not.

Question. Did they agree to do so in writing?

Answer. My impression is, that some did, but not all of them.

Question. Where were the half-breeds paid?

Answer. In my office or house at Mendota; I mean the greater part of them.

Question. Were the "half-breeds" generally indebted to you or to the fur company.

Answer. Quite a number of them were.

Question. Did Hugh Tyler ever tell you that he had this "per centage money" on deposit in any bank or banks?

Answer. He did not.

Question. Did you tell the claimants, unless they paid this per centage to Hugh Tyler that the money would be paid into the hands of the Indians, or words to that effect?

Answer. I do not recollect that I made any such assertion; but I do recollect of saying that I thought it would be policy to do so. I took the ground from the commencement that the claimants were bound in good faith to pay the expenses incurred, the half-breeds included, as the amount which the half-breeds were to receive was looked upon by the claimants as entirely a gratuity on their part, and taken from the claimants.

Question. What amount was first agreed to be paid to Hugh Tyler?

Answer. Two and a half per cent. That is, there was no distinct agreement to that effect; but that is what I said to him, and what I thought the claimants would consider a fair compensation. One reason why I consented to pay Hugh Tyler "*ten*" per cent. was, that he bound himself to pay demands against the claimants for services of agents and attorneys in Washington, who had been employed on the part of the claimants.

Question. Were not the Indians assembled on frequent occasions, and several fruitless attempts made to get them to make some disposition of this money to the traders?

Answer. I state, that they were assembled on the night of the day on which the treaty was executed; all the chiefs, without exception, and most of the braves, and a majority of the claimants. The accounts were presented to them in detail, one by one; they then stated the names of the individuals, with the sums they wished paid to each. They did not sign a paper that night, but promised to do so the next day, as it was necessary to make a *pro rata* distribution, which required considerable labor; they admitting a larger amount of indebtedness than the sum of ninety thousand dollars (\$90,000). The paper *pro rata* was prepared accordingly, and presented to the Indians the next day. Some of the claimants were allowed so much less than they thought they ought to get that a strong influence was made with the Indians to set it aside, and they (the Indians) consequently refused to sign the paper. Five of the chiefs came to me and told me that if Alexander Farribault and myself would abandon the other claimants,

that they would pay us the full amount of our respective claims, and offered to sign an obligation to that effect. We refused to do so. The Indians did hold councils subsequently, and although some chiefs would agree to one thing, and some to another, they never did agree to anything definite.

Question. Are the Indians capable of investigating and determining upon large amounts of money, or of accounts, with any degree of correctness?

Answer. I do not think they are. The Indians have a general idea of the amount of capital stock employed or engaged in the trade; and would know that they owed those with a large capital stock more than they did a small trader.

Question by Governor Ramsey's counsel. What is the character of the person who was on the committee of the traders at Traverse des Sioux, who it is said cannot read or write?

Answer. I believe him to be a competent business man, and very capable of taking care of his own interest; and was in my judgment a very proper person to be placed upon the committee, for different reasons.

Question. What was the value of the draft when you received it from Governor Ramsey?

Answer. It was at a premium; but I cannot say at what premium.

(Here follows a copy of Mr. Sibley's account against the See-see-toan and Wah-pa-toan bands of upper Sioux Indians.)

The SEE-SEE-TOAN and Wah-pa-toan bands of Da-ko-ta or Sioux Indians
To H. H. SIBLEY, agent for American Fur Company, Dr.

For balance of account due at the trading post at Lac qui Parle for the years 1821, 1822, 1823, 1824, 1825, and 1826..... \$13,600 00

For balance of account due at the trading post at Traverse des Sioux for the years 1821 to 1827 inclusive. 20,500 00

For amount due to outfits at Little Rocher, Patterson's Rapids, River du Rocher, and other posts on the Des-moines river from 1820 to 1825.....\$14,200 00

Do do for the year 1832..... 3,400 00

Do for Laframboise's outfit at Little Rock for the years 1834, 1835, 1836, and 1837..... 13,200 00

30,800 00

For balance of account due at Big Stone Lake, Lake Traverse, Riviere Jacques, Riviere Cheyenne, and Devil's Lake, from 1821 to 1838..... 72,663 40

For horses, cattle, &c., killed, and other depredations at Lake Traverse..... 2,451 00

For fort and buildings destroyed at Lake Traverse..... 5,000 00

80,084 40

144,984 40

TERRITORY OF MINNESOTA, }
County of Da-ko-ta. }

Before me, Alexander Ramsey, superintendent of Indian affairs, personally appeared H. L. Dousman, Joseph R. Brown, and H. H. Sibley, who being severally sworn do depose and say, that the within account is true and just according to the best of their knowledge and belief, and that the within named sum is due and unpaid by the bands named in said account.

H. L. DOUSMAN,
 JOSEPH R. BROWN,
 H. H. SIBLEY.

Sworn to and subscribed before me at Mendota, this 7th December, 1852.

ALEXANDER RAMSEY.

MARTIN McLEOD, of Lac qui Parle, sworn and examined as a witness on the part of Governor Ramsey.

Question. Where do you reside?

Answer. In Hennepin county, and at "Lac qui Parle" in the Minnesota Territory.

Question. How long have you resided among the Indians?

Answer. I have been sixteen years in Minnesota, and most of the time among the Sioux Indians.

Question. Were you present at the treaty of Traverse des Sioux and Mendota, in July and August, 1851?

Answer. I was.

Question. Were you a trader among the Sioux Indians previous to these treaties?

Answer. I was a trader with the See-see-toan and Wah-pa-toan Sioux for about ten years.

Question. Did the See-see-toan and Wah-pa-toan Sioux Indians acknowledge any *indebtedness* to their traders at Traverse des Sioux?

Answer. They did. The chiefs said on several occasions, both collectively and individually to me, that they knew they were indebted to their traders to a large amount, which they wished to pay; and they also expressed an anxiety to have the assistance of the traders to enable them to make a good treaty with the government.

Question. Did they ever acknowledge any specific amount to be due to the traders?

Answer. I am not aware that they ever did. But they did acknowledge that they were indebted more than they supposed would be allowed by the commissioners; and they wished the traders to make the division among themselves.

Question. Did the traders agree to receive this reduced sum in acquittance of their liabilities?

Answer. So far as I am aware, a large majority of the traders did so agree.

Question. Were you present at Traverse des Sioux at the signing of the treaty of July 23, 1851?

Answer. I was.

Question. Were you also present at the signing of the so-called "**Traders' Paper**?"

Answer. I was.

Question. Is the paper now shown to you the original "**Traders' Paper**," of which you speak?

Answer. That is the original paper.

Question. Did you see the chiefs and headmen sign that paper?

Answer. I did.

Question. Was that paper explained to the Indians?

Answer. It had been explained *previous* to the signing by them—to some of the chiefs to my knowledge.

Question. Did those who signed it, and the other Indians also, have a knowledge of the contents of that paper?

Answer. That question is too general.

Question. Give the names of the chiefs with whom you traded.

Answer. 1. Wah-min-dah-ne-chah, or the "**Orphan**;" 2. O-pee-en-dah, or "**Big Curley Head**;" 3. E-yang-mo-nee, or "**Running Walker**;" 4. E-tay-wah-ke-an, or "**Limping Devil**;" We-ya-ha, a sub-chief or headman; I-te-cho-ka, (who is now dead;) his father was a chief, I believe; and 5. Ink-pah, the chief of a small band at the "**Big Stone Lake**."

Question. Was there a council held at Traverse des Sioux for the purpose of distributing the "**half-breed money**?"

Answer. On the evening the treaty was signed all the chiefs who signed the treaty were present in council.

Question. What was done in that council?

Answer. I was not present during the whole of the council. Some of the chiefs opened the council by stating that they had assembled for the purpose of distributing a sum of money among their relations of the half and quarter breeds. They then went on to mention the names of heads of families, and the number of the children in each family, each chief mentioning the half and quarter breeds who were connected with his band. They also included in the list a few of the half and quarter breeds who were of the Med-a-wa-kan-toan bands. That list was copied by me the following morning on that "**Traders' Paper**," (as shown to me,) and in my own hand-writing, and is a true copy, except one name. When engaged in copying this half and quarter breed list, a number of the chiefs came to my tent and asked me what paper I was writing. I explained the paper to them, and they expressed their satisfaction of the provision made for their half and quarter breed relations. I then said to them that if they would put down one more name, the sum could be more easily divided; that it would then make two hundred and fifty dollars to each. All the chiefs present requested me to add another name.

Question. Did you hear any remarks made by the Indians at the signing of the "**Traders' Paper**" that would go to show that they knew what was in that paper?

Answer. I heard Ish-ta-hum-bah, or Sleepy Eycs, and I think Wah-

min-dab-ne-chah, or the Orphan, make some remarks after the close of the treaty council, such as these: That he hoped the traders would now be satisfied, since they (the Sioux) had rubbed out their debts, and he hoped that hereafter the traders would sell them some articles of goods, which he mentioned, cheaper than they had heretofore done. The words of the "Orphan," as near as I can remember, were, that he hoped the traders' hearts would now be glad for what they (the Indians) had done for them that day.

Question. What is the character of the government among the Indians? and cannot a few braves make the chiefs abandon their most solemn engagements?

Answer. They can, when, as is frequently the case, they control the whole or a majority of the band.

Question. Were you at the payment at Traverse des Sioux?

Answer. Yes; in December, 1852.

Question. See Senate document No. 29, part 2, and page 7, receipt to Governor Ramsey, and say who are the chiefs whose names are on that receipt; and were you present when they signed it?

Answer. I was present when four Indians, who I consider chiefs, signed that paper, to wit: 1. "Young Sleepy Eyes;" 2. Wah-na-3. O-ta-ke-ta; and 4. No-hope-ton. These are the names of the chiefs so far as I know.

Question. Was that receipt explained to them?

Answer. So far as I know, it was fully explained to them through an interpreter.

Question. Was Governor Ramsey present?

Answer. He was.

Question. Was any bribe or offer made by Governor Ramsey to induce the Indians to sign it?

Answer. There was not.

Question. Did he in any manner, by threats or otherwise, overawe or intimidate them so as to procure their signatures in an improper manner?

Answer. He did not.

Question. See pages 25 and 26, Senate document No. 29, part 2, and say whether the same persons who signed the amendments to the treaty also signed the power of attorney to Governor Ramsey, dated 8th September, 1852?

Answer. They are the same—twenty-seven names to each paper, though some are spelled a little differently?

Question. Did Governor Ramsey at the payment at Traverse des Sioux attempt, by cruelty and injustice, to induce the chiefs to allow the distribution of the fund appropriated to the traders, or to sign the receipt therefor?

Answer. I did not attend all the councils held at Traverse des Sioux, but I have no reason to believe that Governor Ramsey used, or attempted to use, any cruel or coercive measures to compel the chiefs to sign receipts, or any other papers, or to distribute the traders' fund against their wishes.

Question. Were any of the chiefs at Traverse des Sioux so intimidated that they were afraid to act as they desired?

Answer. I know that some of them were, for a number of days previous to the payment, and prevented from calling on Governor Ramsey to hold councils with him as they desired to do. This was in consequence of a "*soldiers' lodge*" which had been established by the band at Traverse des Sioux, headed by "Red Iron."

Question. Did you present a claim against the Indians at Traverse des Sioux?

Answer. I did for twenty-five thousand and forty (\$25,040) dollars, and it was sworn to by me before Governor Ramsey. It was correct and due to me to the best of my knowledge and belief. The articles charged in the account were not all delivered to the Indians in my presence, but by persons in my employment. Yet I had no reason to believe that any of the accounts were incorrect; and I still believe they were correct.

Question. Why are your accounts of so long standing?

Answer. Because the Indians were unable to pay, and there had been no treaty ratified.

Question. What was the average amount of your capital stock employed during the ten years you were trading with the Indians?

Answer. I will say from five to ten thousand dollars. This includes invoices of goods, provisions, &c., obtained from time to time during the trading season, and is, as a general thing, not included in the invoice prepared by the trader previous to his obtaining a license. There are also heavy expenses and a large amount of capital employed in the trade which does not appear on the invoice—such as the wages of men, a large number of horses and other animals, absolutely necessary for the prosecution of the *upper* Sioux trade. I estimate at the price the goods cost us in the Indian country, and not the price at which we dispose of them.

Question. Will you fix the average value of the skins and furs received by you from the Indians, and your annual receipts from them in money, furs, skins, and peltries?

Answer. I cannot do that, but my annual receipts from them have never equalled the amount of the invoices of goods brought into the country by me except for one year; but, on the contrary, during a number of years the returns fell far short of the amount of goods and other articles brought into the country by me. And my accounts against the Indians are the balances appearing due on the books kept during the trade by myself and others in my employment.

MARTIN McLEOD cross-examined by the government commissioners.

Question. Do you know of any traders with the Wah-pa-toan and See-see-toan bands of Sioux Indians who presented claims which were excluded or not allowed?

Answer. I do not. I know of *two* claims that were omitted to be presented—one of James Wells, and a small claim of Levi Bird, who had traded with these Indians on his own account with goods furnished by me.

Question. Do you know why it is that the papers which have been executed at different times have the names of different chiefs attached to them?

Answer. It is almost impossible to get the same Indians collected at different times ; and sometimes the same Indians appear with different names—many of them having two names.

Question. Did the chiefs, when you were present, ever ask Governor Ramsey at any council to submit the traders' accounts to arbitrators or to persons to investigate them?

Answer. At no council where I was present did the Indians make such a request of Governor Ramsey.

Question. Had the money been paid into the hands of the Indians would they have retained any for subsistence and removal?

Answer. I think that they would not. On the contrary I have reason to believe that they would have squandered the money, and that would have led to serious difficulties among themselves.

Question. Was the distribution of the debt fund fair and equitable?

Answer. It was as fair and equitable as it could have been made under the circumstances.

Question. Was there much turbulence and excitement among the Indians for a few months before the payment at Traverse des Sioux?

Answer. There was a good deal of excitement, which was caused, I believed, then and now, by persons telling the Indians that they had been deceived and cheated by their old traders ; which persons had been endeavoring to divert the money from the payment of their debt and from the original purpose for which they intended it. This is my opinion.

Question. How long were the Indians kept waiting for their "annuities" at Traverse des Sioux before the payment?

Answer. I am not aware that they were detained from any particular cause. I know that Agent McLean had great difficulty in making out the annuity or pay rolls, it being the first time the *upper* Indians had ever been paid or assembled for that purpose. And I believe the rolls were not completed until the evening before they received their pay.

Question. From your long acquaintance with the Indians what is your opinion of their veracity when they have either feeling or interest in the subject-matter of their testimony?

Answer. I have no confidence whatever in their veracity when they are interested.

Question. Would you believe them under oath any sooner than speaking without being sworn?

Answer. I would not.

Question. Do you know the number of the chiefs of the See-toan and Wah-pa-toan Sioux Indians, who are so acknowledged by them as such?

Answer. I do not ; among the "upper bands" the question of chieftainship is one I could never fully comprehend. I do not believe that it is fully understood by the Indians themselves. The names of the other chiefs I have not named, are, 1. Ish-tah-hum-bah, senior, "Old Sleepy Eyes;" and 2. Ish-tah-hum-bah, junior, or "Young Sleepy Eyes;" 3. Mah-zah-shah, or "Red Iron;" 4. E-tay-wah-an, or "Limping Devil;" 5. Wah-min-dah-ne-chah, or the "Orphan;" 6. E-yang-mo-nee, or "Running Walker;" 7. O-pee-en-dah, or "B

Curly Head;" 8. Ink-pah; 9. O-tak-e-ta; 10. Wah-na-ta; 11. No-hope-ton; and 12. "Burning Earth."

Question. Is old "Sleepy Eyes" a superior chief to "Red Iron?"

Answer. I always considered him so.

Question. What was the aggregate amount of the accounts of the traders presented against the Indians at Traverse des Sioux?

Answer. About four hundred thousand dollars (\$400,000) and upwards.

Question. When white men are called upon the stand as witnesses, do you attach as much weight to the testimony of those who are interested as to those who are not?

Answer. When I know them to be men of integrity, I would attach as much weight to their testimony.

Question. How much of your claim of twenty-five thousand (\$25,000) dollars against these Indians did you receive?

Answer. As near as I can recollect, I received about three-fourths of it; which is about nineteen thousand dollars (\$19,000).

Question. Who paid that sum of money to you?

Answer. Hugh Tyler, the attorney for the traders and half-breeds.

Question. In what kind of funds were you paid?

Answer. In checks on a New York bank, and a small amount in bank bills or notes.

Question. How much was paid to you in paper money?

Answer. Including the amount I received as trustee, I received upwards of two thousand dollars in paper money.

Question. Was Governor Ramsey present when you were paid?

Answer. He was not.

Question. What per centage was charged you and those for whom you acted as trustee on these claims?

Answer. I paid "*fifteen*" per cent. discount on my claim. My impression is, that I paid a per centage on the "half-breed" money also.

Question. Did you sign a power of attorney to Hugh Tyler to draw your money from Governor Ramsey before you came to Mendota for your pay?

Answer. I did.

Question. Where did you sign such a power of attorney?

Answer. At Traverse des Sioux.

Question. Did you agree to pay him *fifteen* per cent. by that power of attorney?

Answer. At the time the power of attorney was signed, there was nothing said on the subject of per centage, because we had agreed, some time previously, to pay ten per cent.

Question. Did you refuse at first to pay the fifteen per cent.?

Answer. I hesitated about paying, but never refused to pay it.

Question. Did you ever become satisfied that it was just and right to pay that fifteen per cent.?

Answer. I answer, that I hesitated to pay the fifteen per cent., at first. I subsequently became so far satisfied that the amount was not to be applied for any improper purpose, as to induce me to pay the fifteen per cent.

Question. If you became satisfied, say how that fifteen per cent. was to be applied, according to your understanding.

Answer. I have no positive knowledge of what disposition has been made of that fifteen per cent., or rather, of the *whole* of it, which will enable me to answer that question.

Question. Then please say what was done, or is to be done, with any *part* of that fifteen per cent.

Answer. I have reason to believe that a part of that fifteen per cent. was expended by certain agents of the traders in furnishing some provisions and goods and other articles to the Indians of the "*upper*" bands, for the purpose of counteracting the influence of certain other persons, who were attempting to induce the Indians to repudiate their just engagements, under the stipulations of the treaty, as stated on what is called the "Traders' Paper."

Question. Did you see a paper at Mendota containing a list of the names of certain persons to whom some of this fifteen per cent. was paid, or is to be paid?

Answer. I never did.

Question. Did you know or hear of any such paper?

Answer. This is the first time I ever heard of it.

Question. Do you know, from information which you *believe*, that this per cent. was used to employ persons to aid in getting these traders' claims allowed and paid by the Indians?

Answer. I have no doubt that some of it was so applied, from the fact that Hugh Tyler was employed by the traders and half-breeds to aid in securing a portion of the claims; and it was also understood that he was to use his influence to have both the treaties ratified.

Question. Do you know, from information which you believe, that this per cent. was used, or to be used, to pay other persons besides Hugh Tyler?

Answer. I believe, from information, that a portion of that fifteen per cent. was paid to one or more individuals, besides Hugh Tyler. A small portion of it was paid to persons by the consent of the traders, but none of these individuals were connected with the government, so far as I know.

Question. Did you hear any one of the traders, who was paid under these treaties, offer, either by themselves or through others, any money, goods, or property, to the Indians, to induce them to sign Governor Ramsey's receipt?

Answer. I did not hear any trader offer a bribe to any Indian at Traverse des Sioux. But I did hear traders and half-breeds use urgent language to induce them to sign the governor's receipts. I did so myself, but not at the request of Governor Ramsey, or any other person; and so far as I am concerned, I never, upon any occasion, offered a bribe of money, goods, horses, or any other thing, to any chief or Indian of the *upper* Sioux. And I have no reason to believe that any Indian received any bribe to sign any paper at Traverse des Sioux.

Question. Do you consider the giving of presents, of property, provisions, or money to the Indians, to induce them to do or not to do a particular thing, a bribe?

Answer. If it was to make them do a wrong act, I might consider it a bribe; but I apprehend the Indians would not so consider it.

Question. Was the schedule, attached to the so-called "Traders' Paper," attached to it when the Indians signed it?

Answer. It was not.

Question. When was it attached?

Answer. As near as I can remember, the schedule was attached the night of the same day the treaty was signed, and the half-breed list the next morning; both were attached by myself.

Question. Were the chiefs and headmen who signed the "Traders' Paper" present when you attached that schedule?

Answer. They were not all present when I was attaching it. It took some time to do so. But after I finished the paper, a number of head chiefs questioned me as to the amounts allowed to the claimants and also as to the half-breeds. They expressed satisfaction as to the amounts allowed to the traders *in* the country, but were dissatisfied because any amount at all was allowed to traders living *out* of the country, who, they said, had abandoned them many years ago. To the half-breed list they made no objection.

Question. Was H. H. Sibley a licensed trader to the *upper* Sioux Indians?

Answer. From my knowledge I do not know that H. H. Sibley was ever licensed to trade with the *upper* Sioux; but I know that he had traders under him who had licences to trade with them.

Question. How long since Mr. Sibley traded with the *upper* Sioux?

Answer. Mr. Sibley has, so far as I know, not traded up there since I have been in that country, or at "Lac qui Parle." But he was interested in "*outfits*" sent to the upper Sioux Indians.

Question. How did you, as one of the "traders' committee" come to allow Mr. Sibley sixty-six thousand four hundred and fifty-nine (\$66,459) dollars when you had no knowledge of his having been a licensed trader, and how did you make out that amount as due to him?

Answer. We allowed Mr. Sibley that amount "*as agent*," and in the schedule attached to the "Traders' Paper" the word "*agent*" should have been attached to the name of H. H. Sibley, but it was omitted inadvertently.

Question. Had Mr. Sibley his books and accounts there before your committee?

Answer. They were in the tent, but the committee came to the conclusion that they had no time to examine books. Of course, I would not swear that all the books of Mr. Sibley were there, but I have reason to believe that all of his books (I mean the books of those for whom he was acting as agent) were there.

Question. Did you make a *pro rata* deduction off from each claim, or did you make a much larger one from some than others, in making your apportionment?

Answer. On very old claims we deducted an amount coming down to a certain date of the claim; we then made an estimate of the whole amount of the claims, and found by deducting one-third from the old claims, and one fourth from the more recent claims, which the Indians were the most anxious to pay, that the aggregate amount would come

to a little within the two hundred and ten thousand dollars. When we adopted the principle of striking off from the list of claimants all amounts (except as to the two claims of McKinzie and Lockwood, to which the Indians had objected from the beginning, the amount allowed to them being looked upon by us as a gratuity) prior to a certain date, we were under this rule obliged to cut Mr. Bailey's claim down to what he considered an unsatisfactory amount; and after we had concluded the schedule, Mr. Bailey expressed his dissatisfaction with the amount awarded to him, upon which Mr. Sibley and Mr. Dousman, after some consultation, requested me to deduct from the amount allowed to H. H. Sibley the sum of \$5,000, and to add it to the amount previously awarded to Alexis Bailey, and I did so.

Question. Which of that committee was connected with the American Fur Company?

Answer. I suppose that I am considered the person?

Question. What persons constituted the American Fur Company?

Answer. I am not prepared to answer that question satisfactorily to myself.

Question. Was the American Fur Company interested in your claim?

Answer. I have no reason to believe that the "*American Fur Company*" was interested in my claim.

Question. Was the firm of Pierre Choteau & Company interested in your claim?

Answer. As a *firm* I cannot say that they were interested.

Question. Was your claim exclusively in your own right?

Answer. It was not.

Question. Who were interested in it?

Answer. Persons who were interested in the "*Sioux outfits*" at Mendota, for whom Henry H. Sibley had been agent.

Question. Who were the traders in the Sioux country for H. H. Sibley, as the agent of the "*Sioux outfits*," before the treaties of 1851?

Answer. Not being prepared to say when the "*Sioux outfits*" were organized, I cannot state the names of the traders employed by that particular "outfit."

Question. Who were the traders for the American Fur Company among the See-sce-toans and Wah-pa-toans, for which H. H. Sibley was agent, previous to the treaties of 1851?

Answer. They were F. Fresnier, Joseph R. Brown, Joseph Renville, sen., Joseph Laframbois, L. Provincelle, Alexander Graham. N. W. Kittson, Alexander Farribault, and myself. Alexander Graham traded as a clerk; all the rest on their own account.

Question. Do you mean to say that each person bought their "outfit" from H. H. Sibley, and made no returns to him of their sales?

Answer. They generally made their returns in furs, and to H. H. Sibley, as agent for the fur company.

Question. Did the money which was paid on these claims of the traders for the fur company go to Henry H. Sibley, or the traders personally, and for their own private use?

Answer. I was not present when any of these traders were paid their claims, and cannot state what disposition they made of their money.

Question. What persons do you allude to, "who were endeavoring to persuade the Indians to repudiate their debts to the traders?"

Answer. I have already stated that I believed that there were persons tampering with the Indians, and using every effort to prevent them from paying their just engagements, *and I say so still*. This is my answer; I think it unfair to call on me for names.

Question. Who was the interpreter when the Indians signed Governor Ramsey's receipt at Traverse des Sioux?

Answer. When it was signed by *four* of them, in my presence, the interpreter was Alexander Farribault, or Joseph Laframbois. I think they were both present.

Re-examined by Governor Ramsey's counsel.

Question. Was the sum allowed at Traverse des Sioux, of two hundred and ten thousand dollars, sufficient to pay the whole of the indebtedness of the Sec-see-toan and Wah-pa-toan bands to their traders, for debts contracted prior to the treaty of 1851?

Answer. From my acquaintance with the trade for many years, and from reliable information derived from traders and other individuals, I do not believe that the sum of two hundred and ten thousand dollars was sufficient to pay the debts of the Sec-see-toan and Wah-pa-toan bands, which had been contracted prior to the treaty in 1851.

Question. What sum did they acknowledge to be due to the traders?

Answer. They did not acknowledge their indebtedness in one aggregate amount; but they frequently acknowledged their indebtedness to different individual traders, which, in the aggregate, amounted to more than two hundred and ten thousand (\$210,000) dollars. And I frequently heard the chiefs say that they knew the different bands must be indebted to a very large amount, which the traders would have to arrange among themselves, because they could not comprehend the matter.

Question. You stated that you had received drafts on banks for your claim in part; were they at par or a premium?

Answer. The drafts or checks, and bank bills in which I was paid, I received as much value for as if the amount had been paid in gold. I understood that a premium had been paid for some of the drafts.

Question. This acknowledgment of the Indians, of which you speak, was it before or after the treaty of 1851?

Answer. Some of the chiefs conversed with me about it, long before the treaty, and made these acknowledgments. They did so also after the treaty was signed, and upon subsequent occasions.

Question. Was this acknowledgment ever made in open council, when all the chiefs were present?

Answer. I have already said that I could not state who all the chiefs were.

JOSEPH R. BROWN, sworn and examined as a witness on the part of Governor Ramsey.

Question. Where do you reside?

Answer. In Dakota county, Minnesota Territory.

Question. How long have you lived within the limits of this Territory?

Answer. About twenty-eight years.

Question. Were you at the treaty of Traverse des Sioux in July, 1851?

Answer. I was.

Question. Did the Indians, during the negotiation of the treaty, make any acknowledgments of indebtedness to their traders to you, or in your presence?

Answer. They did very frequently during the pendency of the treaty.

Question. How were these acknowledgments made, and by whom?

Answer. It was a general custom with the Indians to meet in council with the traders, after the commissioners had proposed \$25,000 as the annual annuity for the lands they had purchased. There were two or three daily councils between the Indians and the traders, at which, as a general thing, the principal chiefs and soldiers were present. Some may have been absent from one council, and some from another; they appeared to have as great an anxiety that the traders should be paid as upon any other subject connected with the treaty. The traders were frequently sent by the Indians to the commissioners to negotiate in relation to the treaty. The last time the traders went to the commissioners that I recollect of, the Indians proposed to sign the treaty if they were paid annually fifty thousand dollars, and four hundred thousand dollars, to be distributed among the traders and half-breeds. The commissioners refused to entertain it, and proposed as their ultimatum, forty thousand (\$40,000) dollars for their annual annuity money, two hundred and fifty thousand (\$250,000) dollars, to be distributed among the traders and half-breeds, and twenty-five thousand (\$25,000) dollars, for their removal and subsistence. This, the Indians, after consultation, agreed to take.

Question. What amount of indebtedness did the Indians acknowledge to their traders?

Answer. Three hundred thousand dollars.

Question. How did they arrive at that amount of indebtedness?

Answer. I presume it was "*from what they had learned from the traders themselves.*"

Question. Did the traders finally agree to receive a less amount in discharge of their claims against the Indians?

Answer. The traders finally agreed to receive two hundred and ten thousand (\$210,000) dollars. The Indians in council directed the traders to distribute that amount according to the several amounts due to the traders who had not left the country. They reserved to themselves the right to name the mixed bloods that should participate in the forty thousand (\$40,000) dollars, which was to be reserved to them out of the two hundred and fifty thousand (\$250,000) dollars, which

they (the Indians) understood was to be paid to the traders and half-breeds.

Question. Were you present at the signing of the treaty at Traverse des Sioux?

Answer. I was.

Question. Was there any other paper signed at the same council?

Answer. There was a paper signed in the same council which distributed the \$250,000, or which authorized the government officers to pay that sum to certain traders and half-breeds.

Question. Was that paper interpreted and explained to the Indians before they signed it?

Answer. I do not know that the paper was read to the Indians after it was written previous to their signing it. I do know that they expected to sign a paper of that character.

Question. See Senate document No. 29, part 2, and say if that is the paper which was signed by the Indians called the "Traders' Paper?"

Answer. I think it is substantially the wording of the paper they signed.

Question. Did they subsequently speak of that paper, in the same council?

Answer. Some of the chiefs did.

Question. Who were the chiefs and what did they say?

Answer. I recollect the "Orphan," and I think "Sleepy Eyes." They expressed to the commissioners a satisfaction that their debts to the traders had been paid. They spoke of it in open council, and no objection to it was perceptible among any of the Indians present.

Question. When and by what authority was this distribution paper made out. I mean the schedule to the "Traders' Paper?"

Answer. On the afternoon of the day they signed the treaty, and by authority of the Indians, who had directed the traders to distribute two hundred and ten thousand dollars (\$210,000,) to the traders in the country.

Question. Was this direction given in open council?

Answer. It was in a council between the Indians and the traders.

Question. What chiefs were present at the council which authorized this to be done?

Answer. I think all their principal chiefs, and a good many of their headmen. I could not say positively. The Orphan, Big Curly Head, Little Curly Head, the "Pretty Boy," and Bonnet Sun. There was a chief from the five lodges, called "Pretty;" the Gun, and his son; "The Cloud that moves;" the "Little Rapids Chief," and Wa-nok.

Question. How was that distribution made among the traders?

Answer. It was made by a committee appointed by the traders, and composed of Martin McLeod, Louis Roberts, and myself, (Joseph R. Brown.)

Question. Were the traders generally present?

Answer. I think they were all present who had an interest in that fund, except Mr. Bailey.

Question. Is the distribution as made by the committee, truly stated in the schedule attached to the "Traders' Paper?"

Answer. It is.

Question. Is that distribution, a fair and equitable one?

Answer. I thought it was at the time, and have had no reason to change my mind since.

Question. Were there any accounts or claims presented, that were not considered by the committee?

Answer. There were none presented that were not taken into consideration by the committee. The committee in making distribution were guided to great extent by the express wishes of the Indians.

Question. Do you know of any traders' claims that were not presented to the committee for consideration?

Answer. I do not, but I have heard since of one claim.

Question. Will you now explain how the committee proceeded to fix or apportion the sums to the persons named on the list or schedule?

Answer. They, in the first place, took out the accounts of Mr. McKenzie, and that of Mr. Lockwood. The Indians had often refused to pay them anything, because they had left the country. The committee decided to put down for Mr. McKenzie \$5,500, and \$500 to Mr. Lockwood, which was looked upon by the committee as a donation on the part of the traders to these gentlemen. They then deducted from the accounts previous to 1840, if I mistake not, fifty per cent. They then added the whole amount to the claims as they stood together, and found that they still overrun the amount that they were authorized to distribute. They then deducted thirty-three and a third per cent. from the older claims, and twenty-five per cent. from the more recent claims, and the addition then brought them within some fourteen or fifteen thousand dollars of the amount of the two hundred and ten thousand dollars (\$210,000,) which was to be distributed.

One thousand of that was set down to Mr. Wm. H. Forbes, and the other was distributed to, or among the claimants; but how, I do not know. I think I got some of it myself.

Question. Was the final distribution a *pro rata* one?

Answer. It was, leaving out the accounts of Mr. McKenzie and Mr. Lockwood. They were never taken into the account of the *pro rata* distribution.

Question. Did you present a claim, under the treaty of Traverse des Sioux, for allowance by the committee?

Answer. I did, for a sum a few dollars over eight thousand dollars. That account was sworn to by me, and it was correct.

Question. Do you know anything about the distribution of the half-breed fund?

Answer. The chiefs, I think every one who was present at the treaty, were present at a council on the evening of the day on which the treaty was signed, and they named their half-breed relatives, who were to participate in the forty thousand dollars.

Question. For what reason was it that you swore to the correctness of the account of Mr. Sibley?

Answer. It was because I had been three years in the employment of Mr. Sibley, under the "*Sioux outfit*," and kept the books at "*Lac Traverse*," and had brought up and consolidated the accounts I found at "*Lac Traverse*," against the Indians, when I went there.

Question. Did the chiefs and Indians, to your knowledge, at any

time subsequent to the treaty and the distribution of the two hundred and ten thousand dollars, express their satisfaction at what they had done for their traders and half-breeds?

Answer. I do not recollect. The matter was frequently spoken of between myself and the Indians, subsequent to the signing of the treaty, and I do not recollect of hearing any dissatisfaction expressed by any one of them, until Mr. Sweetser brought a band down to Fort Snelling.

Question. Were you at the payment at Traverse des Sioux in the fall of 1852?

Answer. I was.

Question. What was Governor Ramsey's conduct towards the Indians at that time? was it harsh and cruel, or mild and kind?

Answer. I do not know that I saw any treatment on the part of Governor Ramsey that was at all unkind.

Question. What was the spirit manifested by the Indians at that time?

Answer. A very evil and turbulent spirit. I think that during my experience among the Indians, I have never known so much discord and ill-feeling in a camp of Sioux Indians.

Question. What was the conduct of Mah-zah-shah, or "Red Iron"?

Answer. I cannot speak of the conduct of "Red Iron" for the first few days after the officers arrived at Traverse des Sioux.

Question. What produced this state of feeling among the Indians?

Answer. It was owing to different views entertained by different bands of Indians relative to the disbursement of the two hundred and seventy-five (\$275,000) dollars of "hand money" under the treaty.

Question. Was there a "*soldiers' lodge*" erected at that place?

Answer. The "*soldiers' lodge*" was taken down the day after I got there. There had been one erected.

• Question. What is the object and power of a "*soldiers' lodge*?"

Answer. It is the supreme power of the encampment of Sioux Indians. Its object is to regulate and control the movements and policy of the encampment.

Question. Were any of the chiefs collected at the payment intimidated and deterred from going into council with Governor Ramsey in consequence of the erection of that "*soldiers' lodge*?"

Answer. Some of the chiefs who came down with me complained on the evening.

Question. State what the conduct of these Indians was on that occasion?

Answer. Red Iron's band of See-see-toans did not disguise their determination to prevent any intercourse between the upper Sioux Indians, or those opposed to their policy and the government officers, unless it was done under their control.

Question. Were any councils held between the chiefs and the government officers prior to the removal of that "*soldiers' lodge*?"

Answer. I arrived at Traverse des Sioux immediately after a trouble between the United States troops and a portion of Red Iron's band. The Indians were just leaving the council house when I arrived. On the day following a council was held with the Indians, but I was not inside of the council house at the time.

Question. What was the conduct of the other chiefs at Traverse des Sioux?

Answer. With the exception of Red Iron I know of no chief who menaced or showed any insubordination during the payment at Traverse des Sioux.

Question. Cannot a few braves at any time compel their chiefs to recede from their most solemn engagements?

Answer. The soldiers among the Sioux Indians control the chiefs in all matters. The engagement of a chief on behalf of a band of Sioux Indians has no more validity in a "*soldiers' lodge*" than that of any other Indian in the band, as far as the moral obligation of the band is concerned.

Question. Were you present when the receipt executed to Governor Ramsey on page 7, Senate document No. 29, part 2, was signed by the Indians?

Answer. I was present when *five* of them signed it.

Question. Can you name them?

Answer. "Wah-na-ta," "No-hope-ton," Wam-duti-duta, A-ke-pa, and Ixtarba-oketi-dan.

Question. Did these five Indians sign it voluntarily?

Answer. They did.

Question. Was the receipt explained to them before they signed it?

Answer. The receipt was read to them and interpreted either by Mr. Laframbois or Mr. Farribault; I do not recollect which.

Question. Was Governor Ramsey present when they signed it?

Answer. He was. They were assembled in Mr. Kennedy's store. Governor Ramsey was sent for, and it was signed in his presence after being interpreted to the Indians.

Question. How many on that list are chiefs?

Answer. There are seven who I know to be chiefs.

Question. How many chiefs were present at the payment?

Answer. In addition to these I recollect but two others—"Red Iron" and "Running Walker."

Question. Do you know of any threats, or bribes, or any other improper means being resorted to by Governor Ramsey to induce these Indians to sign that receipt?

Answer. I do not.

Question. Did you ever hear Governor Ramsey say in any council at Traverse des Sioux, at which you were present, that he would not pay their "*annuity*" unless they signed that receipt?

Answer. I did not.

Question. Were you present in a council between the commissioners and the Indians, when "Old Sleepy Eyes" asked to have his son considered as a chief, he having become an old man?

Answer. I was; and Colonel Lea told him that his request should be granted.

Question. Do you know the number of chiefs belonging to the See-see-toan and Wah-pa-toan bands of Sioux Indians?

Answer. I do not think I do. I know the chiefs belonging to the upper See-see-toan Sioux. They are Wah-na-ta, Wam-in-day-ne-chah, or the Orphan, No-hope-ton, O-tak-e-ta, Wam-a-du-ta-doo-tah,

Kee-pa-co-ka-mazza, Em-bo-ta. These are the chiefs of the *upper* See-see-toans. The *lower* See-see-toan and Wah-pa-toan chiefs are Ink-pa, O-pee-en-dah, or Big Curly Head, Little Curly Head, E-tay-noh-kee-an, or Limping Devil, Wash-ta-dan, Wah-nok-soon-ta, or the Little Rapids chief, E-zang-mo-nee, Big Gun, or Running Walker, Mah-zah-shah, or Red Iron, Ish-tah-hum-bah, or Sleepy Eyes, and another chief at the lower end of the "*Big Woods*." These are all the chiefs.

Question. How long has Wah-na-ta been a chief?

Answer. Since the death of his father. I think since 1838 or 1840.

Question. Is not one chief having a band as much recognized as another?

Answer. He is by his band, and more so.

Question. Why is it that among the *upper* bands of Sioux Indians that the papers are executed at different times in the names of different chiefs?

Answer. It is because they have never met the officers of the government together. At the signing of the treaty there was but one chief of the *upper* bands present. The "Orphan," and "Pretty Boy," and "Bonnet Sun."

Question. See the names of the Indians on the paper ratifying the amendments of the treaty and the power of attorney to Governor Ramsey, and say if they are the same, dated September 8, 1852?

Answer. I have compared them, and they are the same.

Question. How many chiefs are there on the power of attorney to Governor Ramsey dated the 8th of September, 1851?

Answer. There are eleven that I know of.

Question. Did you ever hear the chiefs at Traverse des Sioux demand of Governor Ramsey to have the two hundred and seventy-five thousand (\$275,000) dollars paid into their own hands?

Answer. I did not.

Question. Had the money been paid into the hands of the chiefs would they have settled their affairs, paid their just engagements, and retained a sufficient sum for their subsistence and removal?

Answer. They would have squandered it as fast as they could without reference to their debts. It is my impression that a few individuals might have gotten a small portion of their debts. If it had been given to them in bulk they would have fought over it. If it had been given to the different chiefs they would have thought that they had little enough for their own use.

Question. In his intercourse with the Indians has Governor Ramsey's conduct been harsh or otherwise?

Answer. So far as my observation has extended it has not been harsh.

Question. How long were the Indians kept waiting at Traverse des Sioux?

Answer. They were paid, I think, immediately after the rolls were completed.

Question. Why were some of the half-breed Med-a-wa-kan-toans paid out of the half-breed fund of the See-see-toan and Wah-pa-toan Indians?

Answer. Because they were related to and named by the chiefs of the *upper* bands.

Question. Do you speak the Sioux language ?

Answer. I do.

Question. From your long intercourse with the Indians what is your opinion of Indian veracity ; and would it make any difference whether they were sworn or not ?

Answer. It is my impression that the generality of the Indians, if other influences weighed with them, would pay but little regard to the white man's oath.

Question. Would you believe Indian evidence in any case where either their feelings or interests were concerned ?

Answer. Not unless I had some other very good reason for doing it ?

Question. Is it not a difficult matter at all times to collect debts from the Indians ?

Answer. The Indians are generally very willing to pay their debts when they have anything to do it with. Many will do so in preference to disposing of their peltries and furs to other persons. After they have paid a debt, however, they almost invariably expect another credit.

Question. Did you ever attend a council at Governor Ramsey's house with "Little Crow" and other Indians, in which he (Crow) demanded the payment of the money unto their own hands ; and Governor Ramsey refused and said that he would not release their prisoners at the fort until the chiefs signed a receipt for the ninety thousand dollars, (\$90,000,) or any other sum ?

Answer. I did not.

Question. Where were the treaty councils held at Mendota.

Answer. I was not there when they were held.

Question. Where are government councils generally held with the Indians ?

Answer. Large councils have been generally held at Mendota. The agent has generally held his councils at the "agency house" at Fort Snelling.

Question. Which is the most convenient place ?

Answer. Mendota is more convenient for the *lower* Indians generally, and the "agency" for the *upper* Indians.

Question. Why is Mendota the more convenient place ?

Answer. Because the room is larger than the one at the agency.

Question. Did you ever hear any of the Med-a-wa-kan-toan chiefs acknowledge their indebtedness to their traders subsequent to the treaty ?

Answer. I do not know that I did in direct terms, although I heard them say that they had made provision for the payment of their traders.

JOSEPH R. BROWN cross-examined by the government commissioners.

Question. Who paid you your claim against the Indians ?

Answer. I gave Hugh Tyler a power of attorney to draw it from Governor Ramsey, which he did, and paid it over to me.

Question. How much did he pay to you ?

Answer. I think about six thousand and six hundred dollars.

Question. In what kind of funds did he pay you ?

Answer. They were drafts on a New York bank, and a portion of it in the paper money of New York banks.

Question. How much was paid to you in paper money ?

Answer. I think six thousand dollars in drafts, and six hundred dollars in paper money or bank notes.

Question. Had any one else any interest in your claim ?

Answer. Yes, in a portion of it.

Question. Who was interested with you ?

Answer. My brother, Samuel F. Brown ; no one else.

Question. Was your trade with the Indians on your own and your brother's account alone ?

Answer. It was.

Question. Were you interested in the trade and business of the fur company ?

Answer. Only to keep them from getting as many furs as I could. I was trading for myself, except one year of my trade.

Question. How much per centage was paid to Hugh Tyler out of your claim ?

Answer. I paid Hugh Tyler "fifteen" per cent. out of the amount I received.

Question. What per centage was charged the half-breeds ?

Answer. I paid fifteen per cent. for myself and family.

Question. What was to be done with this per centage ?

Answer. I do not know, indeed. It was paid to Mr. Tyler for his services, and for him to pay certain expenses in procuring the ratification of the treaty, and the amendments to the treaty.

Question. What was done with the other part of this per centage ?

Answer. It was all paid to Hugh Tyler.

Question. Did Hugh Tyler get more than ten per cent. of it ?

Answer. I have answered that question.

Question. Do you know, from information which you believe to be true, whether any part of this per centage was offered, or given, or has been, or was to be given to any government officer, or agent of the government, or to Governor Ramsey ?

Answer. I do not, and never had reason to believe so.

Question. Do you know whether this per centage was used in paying any one to get the claims of the traders allowed ?

Answer. It probably originated in that. The object of that money was to secure the ratification of the treaty, and the ratification of the amendments to the treaty. *That far* it was for the purpose of securing the debts of the traders.

Question. Was it to be used in any way to secure the debts of traders in addition to the ratification of the treaty ?

Answer. In addition to that I have never made any arrangement, nor never understood it was to be applied to any other use.

Question. Was it given to, or to be given to, any person or persons in this territory, for services in procuring the traders' debts to be allowed by the Indians ?

Answer. At the time the treaty was made at Traverse des Sioux it was supposed that there would be a good deal of trouble in getting it

through the Senate. It was in consultation with those interested in the treaty, I mean the traders and half-breeds, that it was agreed that such expenses as should be necessary for the consummation of the treaty should be borne *pro rata* by the persons drawing money under it. At the meeting Mr. Sibley was directed to secure the services of Hugh Tyler in procuring the ratification of the treaty. My understanding at that time was, that the participants under the treaty would pay *pro rata* the expenditure that might be made for securing its consummation. I had every confidence that no useless expenditure would be made, and from that day, until I received my money and paid the fifteen per cent., I never inquired in what manner it was paid, to whom it was paid, or for what purpose it was paid.

Question. The per centage allowed to Hugh Tyler seems to come to fifty-seven thousand (\$57,700) dollars; do you believe it cost that much for proper purposes?

Answer. I have answered that question.

Question. You have said that the Indians had frequently, before the treaty of July 23, 1851, at Traverse des Sioux, acknowledged themselves largely indebted to the traders, and were willing to pay as much as three hundred thousand dollars (\$300,000) to them. Now, will you please say whether these Indians are capable of ascertaining or knowing the correctness of so large an amount of indebtedness, and whether they were not influenced by the traders to make such acknowledgements, rather than by any knowledge which they possessed themselves of the justness of such claims?

Answer. They had no other data to go upon except the statements of the traders. The traders had ascertained the amounts due from the Indians from their accounts.

Question. Did not some one or more of the traders' accounts extend as far back in dates as 1821?

Answer. I do not recollect that any of the accounts extended back in date farther than the year 1821.

Question. You say that the Indians directed \$210,000 of the \$275,000 to be paid to the traders who had not left the country. Now, had not the American Fur Company been dissolved for some years before that time, and ceased to trade in the country; and, if so, by what rule was the large claim of that company paid?

Answer. The Indians, I presume, knew nothing of the dissolution of the American Fur Company. The same traders who were trading for the American Fur Company, with but few exceptions, they still saw trading among them, with goods furnished from the same persons. The committee, however, in adjusting the claims, made a decided difference between the *old* claims and the *new* ones.

Question. Did not the Indians always object to the payment of old debts of long standing?

Answer. They did not object to pay traders who were still trading with them in the country, that I am aware of.

Question. Was the instrument of writing which was executed by the Indians to the traders at Traverse des Sioux, on the 23d of July, 1851, usually called the Traders' Paper, read and explained to the Indians

on the day they signed it ; and, if so, when, where, and by whom was it explained to them ?

Answer. It was not. But I do not believe that there was a chief or principal man who signed that paper who did not know that they were signing a distribution of money to the traders and half-breeds. The fact that they spoke of it immediately afterwards to the commissioner satisfied me on that point.

Question. Do you mean to say that *all the Indians* who signed that paper so expressed themselves to the commissioners in your hearing ?

Answer. Two chiefs did so, and no objection was made by any Indian present.

Question. Was this Traders' Paper, written as it now is, explained to the Indians at any time in open council before they signed it ?

Answer. With the exception of the schedule of traders' names and half-breeds, this paper, as written, was explained to the chiefs and principal men at Ta-ka-ra lodge not more than half an hour before the Indians were called to council to sign the treaty. It was in the same lodge and in the same council when they assented to the *ultimatum* of the commissioners.

Question. Please state, as near as you can recollect, what Indian chiefs were present when it was thus explained to them.

Answer. The same chiefs whom I mentioned in my direct testimony this morning as having attended that council. Their names are: Wam-in-day-ne-chah, or the Orphan; Bonnets Sun; Pretty Boy; Ink-pa; Wah-nok-soon-tah, or the Little Rapids chief; Ish-tah-hum-bah, or Sleepy Eyes; O-pee-en-dah, or Big Curly Head; Little Curly Head; E-zang-mo-nec; Big Gun, or Running Walker, and his son; Wash-ta-dan, and others.

Question. Was the *schedule* attached to the Traders' Paper at the time the Indians signed it, with the several amounts to be paid to each trader ; and was that schedule also explained to them in open council ?

Answer. It was not attached to it. The Indians themselves met in council immediately after the treaty was signed, and named the mixed bloods who were to participate in the distribution of the forty thousand (\$40,000) dollars.

Question. Did the Indians, with a full knowledge of this schedule, direct Gov. Ramsey to pay the money in all respects according to the arrangement as therein stated and set forth ?

Answer. I do not know of their having done so in any open council before the payment was made under it, except when they signed the receipt to Gov. Ramsey for the money. The whole amount that they were to pay to the traders, of two hundred and ten thousand dollars (\$210,000,) was explained at the council at which the Traders' Paper was explained to them, and they then understood that the traders were to make such a distribution among themselves of the two hundred and ten thousand dollars (\$210,000) as would be satisfactory among themselves.

Question. When and by whom was this schedule made out, and by whom was it attached to the Traders' Paper ?

Answer. It was made out the same evening that the treaty was signed. *The schedule for the traders* was made out by the committee,

(Martin McLeod doing the writing,) and by Mr. Sibley for the half-breeds. I do not know whether it was attached to the Traders' Paper that evening or not.

Question. Where was Red Iron's band of Indians residing at the time of the difficulty you have spoken of relative to the distribution of payment of the two hundred and seventy-five thousand dollars (\$275,000) under the treaty of Traverse des Sioux of July 23, 1851?

Answer. They were encamped at Traverse des Sioux.

Question. As Red Iron and his band were the residents or occupants of that country and place where the business was to be transacted in reference to the distribution of said money, had they not a right, according to a custom of the Sioux Indians, to establish a soldiers' lodge and thereby to control the actions of the other bands who may have been assembled there?

Answer. The authority of a soldiers' lodge only extends to the own bands.

Question. What was the object of Red Iron and his band in establishing a "soldiers' lodge?"

Answer. I do not know.

Question. Were you employed or requested by Governor Ramsey to assemble the chiefs of the See-see-toan and Wah-pa-toan or other bands of Sioux Indians, for the payment at Traverse des Sioux of the treaty money?

Answer. I was so employed by Governor Ramsey.

Question. What chiefs did you notify to attend at Traverse des Sioux?

Answer. I sent a runner to "Big Curley Head." I proceeded myself to "Lac qui Parle," to notify the Indians there; and from thence to the "Big Stone Lake," and notified the Indians there. The snow had then fallen to the depth of fourteen inches, and I returned back, knowing that it was useless to proceed further.

Question. Were the "Orphan," "Big Curly Head," Sleepy Eyes, "Running Walker," the "Little Rapids chief," "Red Iron," and "Limping Devil," notified to attend?

Answer. Limping Devil was notified by Mr. Laframbois; the "Orphan" was on the Cheyenne, and not notified; Big Curly Head was out in the "Big woods," and did not get in until late in the winter; "Sleepy Eyes" was out towards the "Spirit Lake," and out of the route entirely; Running Walker was there; he was notified by me; the "Little Rapids chief" was there; I did not notify him; and Red Iron lived there.

Question. Did you not know that these last named chiefs had in body protested to Governor Ramsey against this "Traders' Paper?"

Answer. I know that Running Walker had. I know that Limping Devil had also; and when I saw him I told him to hurry if he wished to participate in the payment. I know that Big Curly Head and the Orphan were in favor of the "Traders' Paper." "Sleepy Eyes" know nothing about. The "Little Rapids chief" was not opposed to the "Traders' Paper."

Question. Was not your last year's trade with the upper Sioux Indians in connexion with the "American Fur Company" so called?

Answer. No connexion whatever.

Question. Was not Mr. Kennedy, at whose store the receipts to Governor Ramsey for the two hundred and fifty thousand dollars (\$250,000) was signed, an *employee* of the "American Fur Company?"

Answer. I believe that he was.

Question. What chiefs were present besides those who you saw sign the receipt?

Answer. I do not know that I saw any present except those who signed it.

Question. Were Laframbois and Farribault traders connected with the "Fur Company," or in their employment?

Answer. They were not in their employment, as I believe. They were trading on their own account, but bought their goods from the "*Sioux outfit*."

Question. In what kind of money was your account for \$688 25 paid, for which you gave Governor Ramsey a receipt dated December 31, 1852?

Answer. It was paid in paper money, and I think at my request.

JOSEPH R. BROWN re-examined by Governor Ramsey's counsel.

Question. Do you know from information which you believe to be true, that many of the See-see-toan and Wah-pa-toan chiefs were so intimidated by the menacing conduct of "Red Iron" and his "soldiers' lodge," at the time of the payment at Traverse des Sioux, that they were kept from going into council with Governor Ramsey, and acting generally as they desired to act?

Answer. I believed so at the time, and believe so yet. My belief was founded not on what I saw, but what I heard from the Indians themselves.

Question. Did you ever in any council hear Governor Ramsey refuse (where you were interpreter or present) to release the prisoners at Fort Snelling, or to pay the "annuities" to the Med-a-wa-kan-toan bands, unless the chiefs signed the receipt for the ninety thousand dollars (\$90,000) or any other paper?

Answer. I did not.

Question. Was not the "American Fur Company" dissolved several years ago?

Answer. As far as I understand the changes which took place between the business of the "American Fur Company" and Pierre Chocteau, Jr., & Co., there was not a perceptible change in the business transactions of this company.

Question. Do you know a single chief except "Red Iron" and "Running Walker," who was opposed to the "Traders' Paper," and to the payment of their debts?

Answer. I do not know that I ever heard any chief express an objection to paying their debts.

Question. What was the value of the drafts and notes which you received in payment of your claim?

Answer. They were worth the face of them. I should have preferred them. They suited me better than any other currency.

Question. Were the claims allowed to any other persons on that traders' schedule the same as those allowed to Mr. Sibley?

Answer. They were not.

Question. Was "Red Iron" present and participating in the distribution of the half-breed fund at Traverse des Sioux?

Answer. He was in the council or on the ground, and I think named two of the half-breeds to participate in the half-breed fund.

Question by Governor Ramsey's counsel.

Question. You say when an Indian pays a debt that he almost invariably expects another credit. What do you mean by that statement?

Answer. When an Indian pays his debt to a trader, he thinks, as a matter of course, he is entitled to another credit; and would be very much offended if he did not receive it. It is for this reason we find the large balances on the books of the traders.

Question by government commissioners.

Question. You have been asked by Governor Ramsey's counsel for what reason was it you swore to the account of Mr. Sibley. Now will you please state whether you made oath to the correctness of that account for the whole amount of \$144,984 40, without any discrimination or qualification whatever in your affidavit?

Answer. It was the item of balances due at the "Big Stone Lake," "Lac Traverse," &c., amounting to \$80,084 40, that I swore to the correctness of.

—

WILLIAM HENRY FORBES, sworn and examined as a witness on the part of Governor Ramsey.

Question. Where do you reside, and what is your occupation?

Answer. I reside at St. Paul, and my occupation is that of a merchant.

Question. How long have you resided among the Sioux Indians?

Answer. The better part of sixteen years.

Question. Do you speak the Sioux language?

Answer. I do.

Question. Have you been, and are you now, the Sioux interpreter?

Answer. I have been, and am now, the interpreter for the superintendent of Indian affairs in the Minnesota Territory.

Question. Were you present at the treaty of Traverse des Sioux in July, 1851?

Answer. I was.

Question. Were you present when the debt or "Traders' Paper" was signed at Traverse des Sioux by the Indians?

Answer. I was.

Question. Were the "treaty" and "Traders' Paper" signed in the same council, and about the same time, by the Indians?

Answer. They were in the same council.

Question. Did the Indians understand that they were signing a paper for their traders and half-breeds?

Answer. I am of opinion that they did.

Question. Did the Indians before, or after, or at the time, acknowledge that they were indebted to the traders, and desire to make, or had made, provision for the traders and half-breeds?

Answer. I was asked to be present at a meeting of the chiefs the night after the treaty was signed on the "prairie," where they had assembled to name the recipients of the forty thousand (\$40,000) dollars for the half-breeds, when an Indian, a headman, taking me by the arm, stepped forward, and had the names of my wife and two children entered on the list as recipients. I also in the council, and after the treaty was signed, heard remarks made by old "Sleepy Eyes," wherein he referred to having now paid off their debts. There was another Indian who spoke on the same subject, but I do not recollect exactly what it was he said. I never heard in my talk with the Indians before the treaty any objection to paying their debts.

Question. Did any of the chiefs acknowledge after the treaty that they had made provision for their debts?

Answer. I do not recollect any one in particular.

Question. Was the payment of their debts a subject of general conversation before, after, and at the time of the treaty?

Answer. Such is my impression now that it was.

Question. What was said to you on that subject by the "Little Rapids chief?"

Answer. I do not recollect to have had any conversation with him on that subject. But I was present when a conversation took place on that subject, and I am under the impression that it was perfectly satisfactory, but I am not certain.

Question. What was done at the Indian council where they met to distribute the "half-breed money," and what chiefs were present on that occasion?

Answer. "Limping Devil," "Running Walker," and young "Sleepy Eyes." I recollect these chiefs distinctly; and I think "Red Iron" was there, and quite a number of headmen of the different bands. They were having a list of such of their relatives made out as were to receive a part of the forty thousand dollars, (\$40,000.)

Question. Was the sum of forty thousand (\$40,000) dollars, and the manner of distributing it, named in that council?

Answer. I do not recollect; but they were having the names put down on a paper by a white man.

Question. Did they seem to be aware that some provision had to be made for their "half-breeds?"

Answer. I think so, from the fact that they were naming the persons intended by them to receive it.

Question. Are you related by marriage to the Wah-pa-toan Sioux Indians?

Answer. I am.

Question. Had the money been paid under the treaty into the hands

of the chiefs ; would they have settled their just engagements, and retained a sufficient sum for their removal and subsistence ?

Answer. I have no idea that they would.

Question. How would they most likely have disposed of it ; and what would have been the result of paying so large an amount of money into the hands of the Indians ?

Answer. It would have created a great deal of difficulty among them. The young men of the bands would have felt that the chiefs and headmen had got the "lion's share." They would have squandered a large portion of it in buying horses and liquor ; and while intoxicated, there is no knowing what would have been the result ; even bloodshed.

Question. From your long intercourse with the Sioux Indians, what is your opinion of their veracity ?

Answer. When their interests are at stake, I should not trust them, from the fact that they are generally devoid of moral principle ?

Question. Would you believe them on oath where they had either interest or feeling, or where they conceived themselves to be interested ?

Answer. I would not, with a few exceptions.

Question. Were you present at the treaty at Mendota in 1851 ?

Answer. I was.

Question. Were you present at a "council" about the time of the treaty, when they acknowledged themselves to be indebted to their traders ?

Answer. I was.

Question. Did they fix upon any amount as the sum which they wished to be paid to their traders ?

Answer. I was present the night after the treaty was signed, when all the chiefs of the Med-a-wa-kan-toan bands were present, and when each chief would name a certain amount to be paid to his particular trader, and the amounts named by them came to more money than they had to dispose of.

Question. Do you remember near the amount arrived at ?

Answer. I think it amounted to about one hundred and forty thousand dollars.

Question. Did they generally acknowledge an indebtedness, and express a desire to provide for its payment ?

Answer. They did. They held two councils on that subject.

Question. Were you present when any of the chiefs signed a receipt to Governor Ramsey for ninety thousand dollars ?

Answer. I was.

Question. Was that receipt fully explained to them, and did they understand it ?

Answer. It was.

Question. Did you interpret it to them, and were they satisfied with its contents ?

Answer. I was one that interpreted, and they were satisfied.

Question. Did they sign it voluntarily after it was interpreted and explained to them ?

Answer. They did.

Question. Did you ever hear Governor Ramsey in any council, when

you were interpreter or where you were present, either at Mendota, St. Paul, Fort Snelling, or the "agency," or at any other place, tell the chiefs that he would not release the prisoners confined in the fort unless they signed a receipt for ninety-thousand dollars, or for any other sum, or unless they paid their debts to their traders?

Answer. No, I never heard Governor Ramsey say so; nor did I ever interpret anything of the kind to the Indians.

Question. Do you know of any act of harshness, intimidation, or force, on the part of Governor Ramsey, to induce the Med-a-wa-kan-toan chiefs to sign the receipt to him for ninety thousand dollars (\$90,000?)

Answer. I do not know of any such conduct.

Question. Did Governor Ramsey ever through you, as interpreter, or in your presence, or to your knowledge, make any promise, or offer of any bribe, to the Med-wa-kan-toan chiefs, or either or any of them, to induce them to sign the receipt for ninety thousand dollars, or to consent to the payment of that money, or any other sum, to their traders?

Answer. Never to my knowledge.

Question. At any councils at the "agency" at which you were the interpreter, or where you were present, were the chiefs unanimous in making a demand for their money, or were they divided in "opinion?"

Answer. I was present at two councils, one at Mendota and one at the interpreter's house, (the agency,) where they demanded the money. At the agency they were not unanimous; at the other council there was but one who spoke, and he demanded the money.

Question. Did Governor Ramsey, at the agency, where you say the chiefs were not unanimous, make any suggestions to them; and if so, what were they?

Answer. He suggested that, out of the one hundred and ten thousand (\$110,000) dollars, they ought to pay seventy thousand (\$70,000) dollars to their "traders," twenty thousand (\$20,000) dollars to their "half-breeds," and that he would reserve twenty thousand (\$20,000) dollars for their "removal and subsistence."

Question. In any council where you were interpreter, or where you were present, did the chiefs ever demand of Governor Ramsey that he should appoint arbitrators, or any person or persons as referees, to whom should be submitted the accounts of their traders for investigation and allowance?

Answer. No.

Question. In his intercourse with the Indians has Governor Ramsey's course towards them been harsh and cruel, or has it been kind?

Answer. He has been remarkably kind to the Indians, so far as my knowledge extends, and I have been his interpreter.

Question. Why were the "councils" removed from the "agency" to Mendota, during the payment?

Answer. I know that some of the Indians wished them to be held at Mendota, as it was a more roomy place than at the "agency."

Question. On which side of the Minnesotâ river does the most of the Indians reside?

Answer. Five out of the seven bands, reside on the Mendota side of the river.

Question. Were the Indians kept drunk during the payment at any of the councils, or at any other time, by any person or persons interested, or by their order or connivance?

Answer. Not to my knowledge.

Question. See Senate document 29, part 2, page 7, and say if you witnessed the signature of the last name on that receipt to Governor Ramsey?

Answer. I did at St. Paul. I was not at the payment at Traverse des Sioux. I explained it to him before he signed it. He has a band living with him. Whether he is a chief or not, I cannot tell you. He claims to be the head of the band.

NOTE.—The receipt here alluded to, is the receipt given to Governor Ramsey, by the See-see-toan and Wah-pa-toan Indians, for \$250,000, dated November 29, 1852.

Question. See Senate document 29, part 2, pages 17 and 18, and say which of those chiefs did you see sign that paper?

Answer. I saw Tah-o-ah-ta-doo-ta, or Little Crow; Tah-chan-koo-wash-ta, or Good Road; Shak-o-pee, or Little Six; and We-chonk-pee, or the Star, sign it.

NOTE.—The receipt here mentioned, is the one given to Governor Ramsey by the Med-a-wa-kan-toan Indians, for \$90,000, dated at Mendota, November 9, 1852.

WILLIAM HENRY FORBES, cross-examined by the government commissioners.

Question. Was the "Traders' Paper," which was signed at Traverse des Sioux, explained to the Indians in "open council" the day they signed it, or on the day they signed the treaty?

Answer. I did not hear it explained on that day.

Question. When the Indians acknowledged to owe the traders one hundred and forty thousand dollars (\$140,000,) did they know that the sums mentioned were correct as due from them, or had they been told these amounts by their traders?

Answer. I am of opinion that each trader told the Indians how much each ought to have; but I heard the Indians naming certain amounts, and the amounts thus named came to about one hundred and forty thousand dollars (\$140,000.)

Question. Did they sign any paper to that effect?

Answer. They did not to my knowledge.

Question. What amount did you receive?

Answer. I received seven hundred and fifty dollars of the half-breed money, and one thousand dollars that the traders gave to me.

Question. Was any per centage paid by you on your half-breed part of the money?

Answer. I paid fifteen per cent. on the half-breed money, and "fifteen" per cent. on the one thousand dollars given to me by the traders.

Question. In what kind of money were you paid?

Answer. In paper money, on a New York bank.

Question. Who paid it to you?

Answer. Hugh Tyler.

Question. Were you present when the traders and half-breeds were paid by Hugh Tyler?

Answer. I was present and saw some of them paid.

Question. How much do you think you saw paid to the traders and half-breeds?

Answer. I really cannot tell.

Question. Did you see as much as half paid out?

Answer. I think I did.

Question. What kind of funds were paid to them?

Answer. Mostly on drafts on the Merchant's bank of New York, and some paper money on the same bank, or a good deal of it; and some was on the Manhattan bank. I mean that the bank notes or bills, were on those banks.

Question. Did you furnish government supplies for the Indians, for which you were paid in paper money?

Answer. I cannot recollect distinctly.

Question. Do you know whether any trader offered money or goods of any kind to the Indians, or property, to induce them to pay their traders' debts after the treaty, and before the payment?

Answer. The Indians never denied their indebtedness to the traders; but a great deal may have been said to the Indians by the traders to counteract the influence which was brought to bear against them with the Indians, by persons who were opposed to their paying their debts. At the time I spoke of their having acknowledged their indebtedness to the traders, nothing had been offered them, to my knowledge, to induce them to acknowledge their indebtedness.

Question. Do you know of any trader offering any Indian chief or headman any money, goods, or property of any kind, to induce them to let Governor Ramsey pay the money to the traders?

Answer. *I decline to answer anything the traders done with the Indians.*

Question. Do you know of any goods, money, or other property, being offered to the Indians, to induce them to sign Governor Ramsey's receipts?

Answer. *I decline answering, upon the ground I did the other question.*

Question. Did the chiefs of the Med-a-wa-kan-toan bands, in full "open council," ever direct Governor Ramsey to pay the traders seventy thousand dollars (\$70,000)?

Answer. At one council, there was a chief who spoke in favor of Governor Ramsey's paying their debts, and also two principal soldiers of two other bands spoke to the same effect; but *all* the chiefs did not.

Question. Did a majority of them so speak?

Answer. There were but three chiefs who spoke in that council, and *two* of them spoke against it.

Question. What chiefs directed Governor Ramsey to pay the money into their own hands?

Answer. Wa-ba-shaw and Mock-pee-we-chas-tah, or the "Cloud Man."

Question. Did the majority of the chiefs ever direct this money, in open council, to be paid by Governor Ramsey to the traders?

Answer. Not a majority, in any council where I was present, to my knowledge.

Question. What was Governor Ramsey's reply to Wa-ba-shaw, when he directed the money to be paid "into their own hands"?

Answer. He suggested to Wa-ba-shaw, that they ought to be willing to pay their debts, and suggested the sum of seventy thousand (\$70,000) dollars, out of the one hundred and ten thousand (\$110,000) dollars, as the proper amount they ought to pay to their traders; and twenty thousand (\$20,000) dollars to their "half-breed" relatives; and that he would retain twenty thousand (\$20,000) dollars for their removal and subsistence.

Question. Do you know of any part of this per centage, which was charged the traders and half-breeds, being paid to persons, to aid the traders to get their debts, or of being agreed to be paid to such persons, besides Hugh Tyler?

Answer. Not to my knowledge.

Question. Was this per centage paid exclusively to Hugh Tyler?

Answer. My fifteen per cent. was paid to Hugh Tyler himself.

Question. Do you know of Hugh Tyler's paying any one else a part of this per centage?

Answer. I do not.

Question. Have you good reason to know whether Hugh Tyler has this per centage on deposit in any bank in any of the States?

Answer. I do not know anything about it.

Question. At what place was this "hand money" and half-breed money mostly paid out to the traders and half-breeds?

Answer. At Mr. Sibley's office and house in Mendota. I mean the whole of it.

Question. Did you ever trade for the "fur company" among the Indians?

Answer. Not on my own account; but I have traded as agent or clerk for the company in the Indian country. I have also traded as a partner in my "out-fit" in St. Paul, with Indians and whites, which is called the St. Paul "out-fit."

Re-examined by Governor Ramsey's counsel.

Question. At the time the four chiefs signed the receipt to Governor Ramsey, for the ninety thousand (\$90,000) dollars, what did they say to him, and what did he say to them in reply?

Answer. Governor Ramsey told them that Wa-ba-shaw and Wah-coo-ta had signed the voucher for seventy thousand dollars, (\$70,000,) to be paid to their traders, and twenty thousand (\$20,000) dollars, to be divided among the seven chiefs of the Med-a-wa-kan-toans, for the chiefs to distribute among their half-breeds, and asked them if they were willing to sign the same also, and they assented and signed it. They spoke of being glad that the matter was settled.

Question. You spoke of the most of this money being paid out in drafts; what was the value of these drafts?

Answer. They were at par.

Question. You say you saw Hugh Tyler pay out about half the amount to the traders and half-breeds ; how do you fix that amount ?

Answer. I did not know to a certainty. It was only a guess of my own. It might have been that much, or it might have been more.

Question. I want to know who the soldiers were, and what bands they represented, who spoke in favor of Governor Ramsey's paying the money to the traders ?

Answer. "Medicine Bottle," of "Little Crow's" band, and Little Six's brother of Little Six's band.

Question. Did these soldier's represent their bands ?

Answer. I think they did of a great majority of their bands. I think that "Little Crow" and "Little Six" were present. "Little Crow" I know was present. They did not object to what was said.

Question. Do you know of any traders offering any chief or headman any money, goods, or other property, to induce them to sign receipts, or to permit Governor Ramsey to pay the money to the traders, either by his order or with his approbation ?

Answer. I do not.

Question by government commissioners.

Question. Do you know whether Governor Ramsey was informed, or had heard, that money, goods, or property had been offered to induce the Indians to sign his receipt ?

Answer. I do not.

—

FRANKLIN STEELE, sworn and examined as a witness on the part of Governor Ramsey.

Question. Were you at the treaty at Traverse des Sioux in 1851 ?

Answer. I was during the negotiation, but I was not at the signing of the treaty.

Question. Did you attend any of the councils while there between the traders and Indians ?

Answer. Some of the small councils, but none of the general councils.

Question. What was the object of these councils ?

Answer. It was in order to determine the amount of the indebtedness of the Indians to the traders.

Question. Did the Indians in any of these councils acknowledge their indebtedness to their traders ?

Answer. They did.

Question. What amount of indebtedness did they acknowledge ?

Answer. That was not determined in any council which I attended—not the exact amount.

Question. Did the Indians at any time acknowledge the amount, or about the amount of it ?

Answer. They did. I learned so.

Question. Did you ever hear any of the chiefs and headmen express a wish or desire to provide for the payment of their debts ?

Answer. I did frequently.

Question. In what way did they wish to provide for the payment of their debts?

Answer. By asking a sufficient sum from the commissioners for their payment.

Question. Did you ever hear any of the chiefs and headmen express their satisfaction at having made provision for the payment of their debts?

Answer. I have.

Question. Did you ever hear any of them say how they had provided for the payment of their debts.

Answer. I have.

Question. In what manner did they say they had provided for it?

Answer. In the sale of their country to their "great father."

Question. Did you present a claim against the *upper* Indians, and for how much?

Answer. I did, for near five thousand dollars, (\$5,000.)

Question. Was your claim correct and sworn to, and do you still assert its correctness?

Answer. It was correct and sworn to, and I still assert it to be correct.

Question. Were any of the claims presented by the traders excluded from distribution?

Answer. No claims of licensed traders, that I had any knowledge of.

Question. Do you know of any claims of traders, prior to the treaty in date, that were not presented?

Answer. I do not.

Question. Do you consider the distribution, as made at Traverse des Sioux, fair and equitable?

Answer. When governed by the rule adopted in regard to the distribution of claims, I considered it was.

Question. Were you present at the payment at Traverse des Sioux?

Answer. I was.

Question. What was the spirit and feeling manifested by the Indians at the time Governor Ramsey arrived there?

Answer. By a portion of them that of kindness, and by another portion that of hostility.

Question. What portion of them were disposed to be friendly?

Answer. A majority of them were friendly.

Question. Who were disposed to be hostile?

Answer. "Red Iron" and his soldiers.

Question. What was the conduct of "Red Iron" and his soldiers.

Answer. His conduct was hostile and belligerent. In his speech to the governor, and in his refusal to come when sent for, it appeared to be his intention to thwart the governor in carrying out the purpose of his mission, and to intimidate other Indians from holding councils with him.

Question. Had he erected a "soldiers' lodge?"

Answer. He had.

Question. For what purpose was that "lodge" erected?

Answer. To govern and control the action of all the Indians belonging to that encampment.

Question. Were the other Indians intimidated by the conduct of "Red Iron" and his band from going into council with Governor Ramsey, and generally restrained from acting as they desired in regard to the payment?

Answer. Many of them stated that they would have went to see the governor and had a talk with him, (chiefs and Indians,) but that they feared the band of soldiers under "Red Iron." They were generally restrained during the existence of the "soldiers' lodge."

Question. Did you hear any of the chiefs in council with Governor Ramsey demand the payment of the "*hand money*" into their own hands; and if so, state in what manner the demand was made?

Answer. Red Iron demanded it, and in a very positive manner.

Question. Do you know of Governor Ramsey's sending word for the chiefs to come into council, and what word they sent back to him?

Answer. I know that Governor Ramsey sent messengers frequently, but do not know what reply they brought to the governor.

Question. Do you know for what purpose he sent for the Indians?

Answer. For the purpose of making out "rolls" preparatory to the payment, and for having a general talk with them.

Question. Did they come when Governor Ramsey sent for them?

Answer. Not at first, but they did afterwards.

Question. Why did they not come in the first instance?

Answer. Some of them assigned the fear of the "soldiers' lodge" as the cause, and others wished to have a council among themselves first.

Question. When and for what reason was the chief "Red Iron" arrested?

Answer. For his refusal to come when sent for, and for his interference with the other Indians.

Question. Say what his conduct was, after Governor Ramsey had published an order among them that no chief should come before him with more than four or five of his soldiers, by attempting to break through the white soldiers with his band?

Answer. He came at the head of his band or "soldiers' lodge" of men, and attempted to pass through the line of sentinels stationed there by Captain Monroe. He approached in a very determined manner, and when repulsed by Captain Monroe, he returned apparently much excited. I allude to him and his band firing off their guns, and making a noise as they returned to their "soldiers' lodge." I do not mean that they fired at the white soldiers, but merely firing off their guns.

Question. Was the "soldiers' lodge" afterwards broken up?

Answer. It was, by the positive order of Governor Ramsey.

Question. Were there any general councils held between the chiefs and Governor Ramsey before that "soldiers' lodge" was destroyed and "Red Iron" arrested?

Answer. No general council.

Question. What produced this hostility on the part of "Red Iron," and his interfering with the Indians so as to prevent the holding of councils with the government officers?

Answer. His opposition to the manner or mode of payment intended to be made by the governor, and his wish to have the money.

Question. What was the desire of a majority of the chiefs present in regard to the manner in which their "*hand money*" should be paid?

Answer. I did not hear a majority of the chiefs express their opinion on that subject.

Question. Did you hear any of the chiefs express a willingness to pay their debts to the traders prior to the payment?

Answer. I did. A chief named "O-tak-e-ta," "Wah-na-ta," "Limping Devil," and "Young Sleepy Eyes," were the only chiefs I heard express a willingness that the payment should be made as it was made.

Question. Were you present when any of the chiefs signed the receipt to Governor Ramsey for the two hundred and fifty thousand (\$250,000) dollars?

Answer. I was present when one of the chiefs signed, and only one, it was "O-tak-e-ta."

Question. Was the receipt explained to him before he signed it.

Answer. It was.

Question. Did he sign it voluntarily, without any bribe, or any other improper act, on the part of Governor Ramsey?

Answer. The chief O-tak-e-ta, when he came in, stated that he came for that purpose. I heard no threats, nor inducements of any kind to procure his signature to the receipt.

Question. Did you hear any opposition to the payment of this money in the manner in which it was paid, prior to its being paid; and if so, by whom?

Answer. By "Red Iron," and one other of his band.

Question. Was Governor Ramsey present when the receipt was signed by "O-tak-e-ta?"

Answer. He was.

Question. Did you ever hear Governor Ramsey in any council where you were present, refuse to pay the "annuities," until the chiefs signed the receipts for the "hand money?"

Answer. I do not recollect of ever hearing him say so.

Question. Did you ever hear the chiefs, either at Mendota, or at Traverse des Sioux, request Governor Ramsey to appoint any person or persons to examine into the correctness of the accounts of the traders?

Answer. No.

Question. Why were the Indians kept waiting at Traverse des Sioux for the payment of their "annuities?"

Answer. From the fact that the "rolls" on which they were paid were incomplete.

Question. Why were the "rolls" not made out sooner?

Answer. The Indians had not brought in the returns of the number of each band and family.

Question. What prevented them from doing so?

Answer. In the first place, the fear of the "soldiers' lodge;" and after that was abolished, I know not.

Question. Were they paid as soon as the "rolls" were completed?

Answer. I believe they were.

Question. Do you know of any act of oppression, cruelty, force, or menace, used by Governor Ramsey, to induce the chiefs, or either of them, either at Mendota, or at Traverse des Sioux, to sign the receipts or vouchers for the "hand money," due under the treaties of July 23d, and August 5, 1851?

Answer. I do not.

Question. What has been the conduct of Governor Ramsey towards the Indians generally; has it been harsh and oppressive, or kind and indulgent?

Answer. I believe that it was generally kind.

Question. What constitutes a chieftainship among the Indians?

Answer. A civil chief is an individual selected by a majority of the band to transact business with the government. In some instances such chiefs are made by the Indian agent or by the government, without reference to the band.

Question. Were you present at any of the councils between the Indians and the traders about the time of the treaty at Mendota in 1851?

Answer. At one council.

Question. What was the object of that council?

Answer. To determine the amount that the Indians should allow to each individual trader.

Question. Did they so determine?

Answer. They disagreed in regard to the amount due to all.

Question. Did they acknowledge any amount of indebtedness to the traders at that council?

Answer. They did in reference to some but not to all. They acknowledged their indebtedness to all, but did not fix the amount due to each individual. I was not at the first council nor at the last.

Question. Did the Indians in that council, or anywhere else, express a desire to pay their traders?

Answer. They did repeatedly.

Question. How did they expect to pay them?

Answer. From the proceeds of the sale of their lands by the treaty.

Question. Was any amount ever agreed upon between the Indians and the traders, that should be received in full acquittance of their debts, to your knowledge?

Answer. The sum of seventy thousand dollars (\$70,000) was agreed upon by the Indians.

Question. Did you, at any time subsequent to the treaty, hear any of the chiefs or headmen express their satisfaction at having thus provided for the payment of their debts?

Answer. I did.

Question. Did you, subsequent to the treaty, hear any of the chiefs or headmen say how they had provided for the payment of their debts?

Answer. I have. They said, "We have sold our lands and paid our debts and are now poor." This was after the payment.

Question. Were you present at the payment at Mendota?

Answer. No; I was about the fort and agency at the time.

Question. Do you know whether the chiefs of the Med-a-wa-kan-toan bands ever consented to the payment of the seventy thousand dol-

lars to their traders, and so directed Governor Ramsey to pay it to them?

Answer. They did.

Question. Will you state whether Wa-ba-shaw and Wah-coo-ta did not frequently request you to send for Governor Ramsey to come and see them; and, if so, for what purpose?

Answer. They did twice ask me to send for him, saying that they had consented that the payment should be made as it finally was made.

Question. Did Governor Ramsey come?

Answer. He did.

Question. Did he meet the chiefs when he came?

Answer. He did.

Question. What was said by Governor Ramsey to the chiefs, and what by the chiefs to him?

Answer. He said that he had sent for, and wished to know what they wanted with him or to say to him. Wah-coo-ta said that he was sick, and that his children were sick, and that he wished the payment to take place so that he could return home. He then asked the governor to pay him their proportion of the half-breed money and their proportion of the removal fund, to be divided among the chiefs equally in cash; and when that was done they wished him to pay them their annuity money, and to give them some provisions to go home. The governor stated in reply that he would pay them twenty thousand dollars for their half-breed relations, but could not pay them the twenty thousand dollars which was set aside for removal and subsistence. He asked them if they were prepared to sign the receipt for the seventy thousand dollars (\$70,000.) The Indians said that they would like to consult with each other before they did so. They then left with their headmen, who were with them at the time, and in about an hour they sent for the governor again, and said that they were willing to sign the receipt for the seventy thousand dollars, (\$70,000,) and wished him to pay the traders, and said that they would pay the half-breeds themselves. The receipt for seventy thousand dollars was then drawn up and signed. The receipt was explained to the Indians in the presence of three or four interpreters. The governor then requested them to meet him with the other chiefs at Mendota. They refused to do so, assigning as a reason that they had not been invited to any of the feasts of the other five bands. After signing the receipts they requested that the payment might be made as early as possible.

Question. See Senate document 29, page 18, part 2, and say how many chiefs you saw sign that receipt for ninety thousand dollars (\$90,000).

Answer. I saw six of the chiefs sign it.

Question. Where did you see them sign it?

Answer. Two of them in my own house and four at Mendota.

Question. State whether it was explained and interpreted to them before it was signed.

Answer. It was fully explained to them.

Question. Do you know of any force, coercion, bribe, or any improper thing being done by Gov. Ramsey, or by any one at his instance or in his presence, to induce these Indians to sign that receipt?

Answer. I do not.

Question. Did not the chiefs who signed it at Mendota express great satisfaction at the result, and in what manner?

Answer. They expressed their satisfaction, and stated that Wah-coo-ta and Wa-ba-shaw wished to have the credit of having first signed it, and that this was the reason why they had not come over there to sign it.

Question. Were you present when any part of this twenty thousand dollars was paid to the chiefs; and, if so, to whom?

Answer. I was present when the portions of Wa-ba-shaw and Wah-coo-ta were paid to them. It was paid over to the two chiefs, each his share, in two bags, by Governor Ramsey.

Question. Was it paid to them, and did they receive it?

Answer. It was paid to them. They were sitting together at the end of the table, and the governor told them there was their money. I think it was a little short of three thousand dollars to each.

Question. Did you, before they touched it, step forward and take up one of the bags and carry it away?

Answer. No; Wa-ba-shaw picked his bag up and held it in his hand, and then set both bags down together on one side of the table and moved back a few feet from the table. They received it and receipted for it, the receipt being explained by four or five persons who spoke the Sioux language.

Question. Did Governor Ramsey say "There is your money, and you can count it if you have a mind to do so"?

Answer. He requested them to count it.

Question. When it was put down on the table did they both take it up and move it a short distance?

Answer. I think not. Wa-ba-shaw did, but Wah-coo-ta did not.

Question. Had these two chiefs given an order to any person for their money before they received it?

Answer. They had.

Question. To whom was that order given?

Answer. It was given to Jack Frazer.

Question. Was that order presented to Governor Ramsey?

Answer. It was.

Question. What did Governor Ramsey say when it was presented to him?

Answer. He said he could not pay it; that he must pay the money into the hands of the chiefs.

Question. Did you ever hear Governor Ramsey, "in council" with these chiefs, or with any or either of them, in or out of council, tell them that unless they signed these receipts, or the receipts for the "hand-money," that he would not pay them their "annuities" or release their prisoners at the fort, or use either expression?

Answer. I never did.

Question. How long was the payment of their "annuities" delayed after Governor Ramsey returned with the money to St. Paul?

Answer. About a week or ten days, as near as I can recollect.

Question. Had the whole of this money been paid into the hands of the Indians, under either the *upper* or the *lower* treaty, would they have

settled their affairs, paid their just engagements, and retained a sufficient amount for their subsistence and removal?

Answer. I think not.

Question. What would they have done with it, if it had been paid directly to the Indians? and what would have been the consequence of paying so large an amount of money into their own hands?

Answer. The *lower* bands would have squandered a large part of it, and the balance they would have expended in buying horses and trinkets. The *upper* bands would (a portion of them) have disposed of theirs in the same way, and the balance, I think, would have given it to Mr. Sweetser.

Question. From your long intercourse with the Indians, what is your opinion of their veracity?

Answer. My opinion is, that, under certain circumstances, they would all deviate from the truth.

Question. Would you believe an Indian on his oath, where he had an interest, or conceived himself interested, or in which his feelings were enlisted?

Answer. Under the fear of punishment, or where a reward was expected, I would not believe him.

Question. Did you present an account against the Med-a-wa-kan-toan Indians?

Answer. I did.

Question. For what amount?

Answer. It was for seven thousand dollars.

Question. Was it correct, and sworn to, and do you still assert its correctness.

Answer. It was correct, and sworn to, and I still assert its correctness.

Question. Did you confederate, in any way, with Governor Ramsey, to absorb the whole, or any part of the Sioux money, and to induce him to pay it out to favorites, to the exclusion of meritorious creditors, or to induce him to pay it out in the manner in which he did?

Answer. I did not.

Question. Which is the most convenient place for holding councils—at Mendota, or at the Fort Snelling "agency"?

Answer. I should think at Mendota, as the Indians live on that side mostly.

Question. State whether, at the time Wa-ba-shaw and Wah-coo-ta signed the receipt, they attempted to sum up their indebtedness to the traders, and what the result was.

Answer. They made a sum to exceed one hundred thousand (\$100,000) dollars, and then gave it up and could not agree. They then concluded to pay the seventy thousand (\$70,000) dollars. This sum was made up by items given in by different Indians. There were fourteen or fifteen of the principal men of each band present.

Question. Was there a large number of Indians present, when the other *four* signed the receipt?

Answer. The room was full; the number I cannot recollect.

FRANKLIN STEELE, cross-examined by the government commissioners.

Question. Did you hear the chiefs in open council, at Mendota, or the "agency" at Fort Snelling, direct Governor Ramsey how they wanted the money, due to the Indians under the fourth article of the treaty of August 5, 1851, paid? and if so, how did they wish it paid?

Answer. I did not hear any directions on the subject.

Question. Did you hear the chiefs, in open council, direct Governor Ramsey to pay the traders seventy thousand (\$70,000) dollars?

Answer. I heard Wah-coo-ta and Wa-ba-shaw direct him to pay seventy thousand dollars to the traders.

Question. Was this in the day time, or at night, you heard them?

Answer. In the evening.

Question. What time in the evening?

Answer. It was after 9 o'clock, p. m., when they gave that direction.

Question. Where was this direction given?

Answer. At my own house, near Fort Snelling.

Question. Do you know of any trader having offered, or given, any money, goods, or property, to any chief or chiefs, or headmen, or promising any one or all of them such things, to get them to sign any paper for Governor Ramsey, or to the traders—which paper was to be used by Governor Ramsey, or by the traders, to draw money from the government, under the treaty?

Answer. I do not.

Question. Do you know whether Wah-coo-ta and Wa-ba-shaw, or one of them, did not, in your presence, demand from Governor Ramsey all the money due to the Indians, under the treaty, to be paid to the chiefs themselves, and into their own hands?

Answer. I do not.

Question. Why was this twenty thousand (\$20,000) dollars given to the chiefs?—and did not Wa-ba-shaw expressly demand that sum, before he would sign the receipt to Governor Ramsey for the ninety thousand (\$90,000) dollars?

Answer. The twenty thousand (\$20,000) dollars was given to the chiefs at their own request; but at the same time, or before, they requested the governor to pay them the forty thousand (\$40,000) dollars. But he did not make it a condition upon which they were to sign the receipt.

Question. Had that demand been made before they signed the receipt?

Answer. It had.

Question. When you say that the Indians agreed to pay the seventy thousand (\$70,000) dollars, do you allude to the fact that they signed the receipt to Governor Ramsey as evidence that they had agreed to pay it?

Answer. No; I allude to the chiefs, Wa-ba-shaw and Wah-coo-ta, and the principal men of their bands.

Question. What evidence have you that a majority of the chiefs agreed to pay it, but by their signing that receipt?

Answer. By their saying that they wished to do so.

Question. What chiefs did you hear say so?

Answer. Wa-ba-shaw and Tah-chan-koo-wash-tah, or "Good Road."

Question. Was this in open council, and in the presence of Governor Ramsey?

Answer. Wa-ba-shaw said it in the presence of Wah-coo-ta and their headmen, and Governor Ramsey was present.

Question. Was a majority of the chiefs and headmen of the ~~sere~~ Med-a-wa-kan-toan bands present?

Answer. No.

Question. Did you ever hear in "open council," where a majority of the chiefs and headmen were present, the chiefs direct Governor Ramsey to pay the traders seventy thousand dollars (\$70,000)?

Answer. I heard in "open council," when a majority of the chiefs and headmen were present, the Indians consent, or say, that they came to sign the receipts for the "traders money." This was one of the chiefs who said so.

Question. Was this council, when they signed the receipt?

Answer. It was at the time they signed the receipt.

Question. Did you ever hear the chiefs, when a majority of the ~~sere~~ Med-a-wa-kan-toan bands were present, at any time before they signed the receipt as spoken of by you, direct Governor Ramsey to pay to the traders seventy thousand dollars (\$70,000)?

Answer. No.

Question. Had not a majority of the chiefs steadily refused to allow Governor Ramsey to pay that money to the traders, up to the council with Wa-ba-shaw and Wah-coo-ta, at your house, near Fort Snelling?

Answer. Some of them did; but I do not know that a majority of them did so refuse.

Question. What was the object of Governor Ramsey in holding councils with the Indians, at the time he was interrupted by the conduct of "Red Iron," and his "soldiers' lodge," at Traverse des Sioux; was it for the purpose of procuring the necessary vouchers or receipts from the chiefs and headmen, to justify him in paying the treaty money directly to the traders and half-breeds, or their agents; or to aid agent McLean in making out the "annuity rolls?"

Answer. I understood at the time that it was for the purpose of aiding Major McLean in getting *data* for making out the "annuity rolls;" what other object he had or business, I do not know.

Question. Was it the duty of agent McLean, or of Governor Ramsey, to make out the "rolls," and to pay the "annuity money" to the Indians?

Answer. I do not know.

Question. Do you know from conversations with Governor Ramsey, or from what you have heard him say in your presence, why he did not deliver this "annuity money" to agent McLean at the first convenient opportunity; and whether it was not withheld by him from agent McLean, until the chiefs and headmen of these bands had either signed, or agreed to sign his vouchers or receipts, for the payment of the money to the traders and half-breeds?

Answer. I was not aware that the "annuity money" was not under Major McLean's control, from the time it arrived there.

Question. Had "Red Iron" and his band the right, according to cus-

tom among the Sioux Indians, to establish a "soldiers' lodge," to regulate the action or conduct of their own band, in regard to this payment?

Answer. I have never know a "soldiers' lodge" to exist, where the Indians were assembled to transact business with the government.

Question. Did not "Red Iron" and his soldiers openly avow their object to be to prevent their treaty money from being paid to the traders?

Answer. I understood that was his object, but I never heard him say so.

Question. From Governor Ramsey's conduct, or from what you have heard him say, had he not promised to pay this treaty money to the traders, or to their agent, Hugh Tyler, before he went to Washington city for the money?

Answer. I have had no conversation with Governor Ramsey on that subject; neither did I hear him say anything on that subject.

Question. From what you have heard Governor Ramsey say, or from his conduct in reference to the payment, would he have paid this money otherwise than to the traders or their agents. Did he not co-operate with the traders, or their agents, in bringing about a result favorable to the traders in regard to the payment—and was this result accomplished without more or less difficulty with the Indians?

Answer. I never heard Governor Ramsey say anything on that subject. I believe it was his wish that it should be paid as it was. I do not know that Governor Ramsey had any difficulty; but I do know that the traders had difficulty in producing that result.

Question. Did Governor Ramsey convoke the chiefs and headmen of the *upper* bands in "open council," and request them to direct him how they wanted the money paid, as provided by the stipulations of the treaty, freely and voluntarily, and without interference on the part of the traders, after his return from Washington with the money?

Answer. I was not present at any council where the governor directed the Indians to direct him how the money should be paid.

Question. Are not the Indians always unwilling to pay old debts of long standing?

Answer. They are, generally, when the parties to whom they are indebted have left the country, or have ceased to trade among them.

Question. Have the Indians generally the means of knowing the amounts due from them to the traders from year to year for a number of years back, or where large amounts are involved, except from the statements and representations of the traders themselves?

Answer. Keeping no records, they have no means of knowing accurately.

Question. Did not some of the accounts of the "American Fur Company," which were included in the amount of Mr. H. H. Sibley, as agent, for upwards of one hundred and forty-four thousand (\$144,000) dollars, extend as far back as thirty years ago or more?

Answer. I think there was; but what proportion of that account, I cannot say; whether these accounts were represented by Mr. Sibley or Mr. Dousman I cannot say, as both of them represented the "American Fur Company."

Question. How much was paid to you on your own account at

Traverse des Sioux, by whom was it paid, in what kind of funds, and what amount of per centage was deducted at the time of payment?

Answer. Three thousand and two hundred and fifty dollars. I was paid by Hugh Tyler, my attorney, in checks on a New York bank. I paid him *fifteen* per cent. out of what was paid to me.

Question. Were you present when the payments were made to the traders and half-breeds either at Traverse des Sioux, the "agency" at Fort Snelling, or at Mendota, and, if so, in what kind of funds were these payments made?

Answer. I was present at the payment of the traders and "half-breeds" at Mendota. They were paid in checks, bank bills, and gold, at the option of the recipients.

Question. Was any considerable part of the payments made in gold, in proportion to the amount of the whole payments?

Answer. I saw but two persons paid in gold, the parties generally preferred paper.

Question. Do you know that Hugh Tyler or Governor Ramsey were prepared to pay gold if the greater part of the money had been demanded in that currency?

Answer. I do not.

Question. Did not the traders always contend and endeavor to make the impression on the minds of the Indians, at all the councils at which you were present, that the "hand money" mentioned in the treaty was intended for their special benefit, and that the Indians were not to have any control of it?

Answer. No.

Question. Did not "Red Iron" in "open council" say to Governor Ramsey that the reason he did not come to council was that his (Governor Ramsey's) soldiers prevented him when he was on his way coming?

Answer. He did.

Question. What was it that "Red Iron" said to Governor Ramsey at the time you say that his conduct was hostile and belligerent?

Answer. It was in his refusal to disband his soldiers, and to come into "council" with the other Indians.

Question. Do you know of your own knowledge that a "soldiers' lodge" was erected by "Red Iron" and his band?

Answer. I know of my own knowledge that a "soldiers' lodge" existed on my arrival there, and that "Red Iron" was at the head of that "lodge."

Question. Do you know of your own knowledge for what purpose that "soldiers' lodge" was erected?

Answer. I know of my own knowledge that it had the effect of controlling the Indians.

Question. Did not "Red Iron" say that it was established to prevent young men and single or individual chiefs from going to the "council" at night, and alone, and there signing papers, and making a disposition of their money secretly, as had been the case with the Med-a-wa-kan-toans, and that he wanted that all the chiefs should go to "council" together, that all might know what was done, or words to that effect?

Answer. He stated that the object of establishing the "soldiers' lodge," was to prevent his people from going alone at night into the traders' camp, or words to that effect.

Question. Were the Indians at Traverse des Sioux paid their "annuities" until after Governor Ramsey had obtained their receipt for the two hundred and fifty thousand (\$250,000) dollars?

Answer. I know that a receipt was obtained *before* the "annuities" were paid, but I do not know whether it covered that amount or not.

Question. Did O-tak-e-ta sign that receipt?

Answer. He did.

Question. Did he sign it in full "open council" with all the other chiefs present?

Answer. What chiefs were present I do not know. I do not think that they were all present; there were Indians present, but what Indians I did not observe. It was signed in the house of Mr. Huddles, (or Huggins,) up stairs in the governor's room.

Question. Was that where the "public councils" were usually held?

Answer. They were generally held in the room below. The room above was where he kept his writing materials, and where he generally transacted his business.

Question. Who was with you at your house on the evening when Wa-ba-shaw and Wah-coo-ta sent for Governor Ramsey?

Answer. Major Alexander, Lieutenant Nelson, Mr. Fillmore, the two Mr. Finleys, Old Rock, and Mr. Labatte and his son. I do not recollect any one else.

Question. What inducements were then and there held out to them to induce them to sign the receipt?

Answer. I know of none.

Question. Did you object to the payment of this *fifteen* per cent. to Hugh Tyler?

Answer. I remarked at the time that I thought the charge an extravagant one, but I did not object to paying it.

Question. Was the evening when Wa-ba-shaw and Wah-coo-ta signed the receipt for ninety thousand (\$90,000) dollars, the same as that on which they received their proportion of the twenty (\$20,000) dollars?

Answer. No.

Question. Where were they paid?

Answer. At the house of Samuel Finley.

Question. Who interpreted at the time they were paid?

Answer. Mr. Rock, in part, and Mr. Labatte, in part.

Question. On which side of the river is Samuel Finley's house?

Answer. On the east side of the Mississippi river, on the road leading to St. Paul from Fort Snelling.

Question. Wa-ba-shaw and Wah-coo-ta say in this examination that they never received any part of this twenty thousand (\$20,000) dollars, but that you and Jack Frazer got it of both of them, amounting to near six thousand (\$6,000) dollars; and that they have never received any part of it since. Please give your explanation of this matter.

Answer. After the governor left the house of Samuel Finley, the Indians gave the money to Jack Frazer, and he handed it to me, with

a request that I should keep it for him. Mr. Rock asked the chiefs why they gave all the money to one man; that he expected a part himself. They replied, that he would get his money as a trader. Rock said that had he known this, he would not have come from home, or so far from home. Wa-ba-shaw replied, that he might return as soon as he pleased. Jack Frazer called on me a few days afterwards and drew several hundred dollars, stating that he wished to give it to his uncle, (meaning Wah-coo-ta.) Frazer continued to draw it at intervals afterwards—for what purposes I know not—during the winter. Wa-ba-shaw and Wah-coo-ta, with their principal men, demanded the balance of the money, stating that they did not intend giving Jack Frazer all of it. I replied, that if they brought Jack Frazer's order, whom I had receipted for the money, that I would pay it over to them, that is, the balance on hand—which they failed to do; and I have since paid the whole amount to Jack Frazer.

Question. Do you speak the Sioux language?

Answer. Imperfectly; but sufficiently to comprehend their wants.

Question. Was the conversation between the two chiefs in the Sioux language?

Answer. It was; and rendered to me in English, principally by Labatte.

Question. Was the payment of the "annuities" to the Med-a-wa-kan-toan Indians made before or after Governor Ramsey had procured these chiefs to sign the receipt for the ninety thousand (\$90,000) dollars?

Answer. I believe it was after; but I do not recollect how soon afterwards.

Question. Were there any Indians confined in the "fort" for the murder of Chippewas, who were discharged about that time?

Answer. I do not recollect. The Indians were frequently confined there; it was a common occurrence.

Question. Were any *provisions* issued to the Indians during their confinement there, before this receipt was obtained?

Answer. I do not recollect.

Question. Do they deliver *provisions* each "*fall*," at the "agency" to the Indians?

Answer. There are provisions issued *each fall* at the "agency."

Question. Were the goods, money, or provisions, paid to them, before they signed these receipts?

Answer. I do not recollect; I think that there was beef given to them before. I think it was given by the government.

Question by Governor Ramsey's counsel.

Question. Were not Wa-ba-shaw and Wah-coo-ta encamped on the east side of the river at the time they received their proportion of twenty thousand (\$20,000) dollars?

Answer. They were. They requested to be paid on the east side of the river. Wah-coo-ta gave as a reason that his health would prevent his going over.

ALEXANDER FARRIBAULT, sworn and examined as a witness on the part of Governor Ramsey.

Question. Where do you reside?

Answer. At "Cannon river," in Minnesota Merritory.

Question. How long have you resided among the Sioux Indians?

Answer. Since the year 1819.

Question. Are you related to them?

Answer. Yes.

Question. To which of the bands are you related?

Answer. To the Med-a-wa-kan-toan and Wah-pa-koo-ta bands.

Question. Do you speak the Sioux language?

Answer. Yes.

Question. Have you been employed at any time as interpreter by the government?

Answer. Yes.

Question. By whom and when were you so employed?

Answer. I was employed by Governor Ramsey at the treaties of July and August, 1851.

Question. Were you present at the treaty at Traverse des Sioux in 1851?

Answer. I was.

Question. While there were you present at any "councils" held between the Indians and the traders?

Answer. Yes.

Question. What object had the Indians and traders in meeting together at these councils?

Answer. It was to consult about the claims of the traders against the Indians.

Question. Were you present at the signing of the treaty of July, 1851?

Answer. I was.

Question. Was there any other paper signed there at the same time?

Answer. Yes.

Question. What was the character of that paper, (the "Traders' Paper" shown to him,) and is this paper the original?

Answer. This is the paper (called the "Traders' Paper") which I saw signed on that occasion.

Question. Were the contents of this paper, to your knowledge, explained to the Indians *before* they signed it?

Answer. They were.

Question. Where was it explained?

Answer. It was about a mile from where the commissioners were encamped in Tah-coo-ta's, Ta-ka-ra's lodge.

Question. Where did the Indians go to when they left this council in which the "Traders' Paper" was explained?

Answer. To a shelter where they generally held their councils, and where they met the commissioners.

Question. Were the treaty and "Traders' Paper" signed immediately after they left the lodge of Tah-coo-ta, or Ta-ka-ra?

Answer. If I recollect right it was signed the next day.

Question. Were the chiefs generally present at Tah-coo-ta's, or Takara's lodge?

Answer. They were with the exception of one chief.

Question. Who explained the "Traders' Paper" to them?

Answer. Joseph Renville and Mr. Gabriel Renville.

Question. Was there any agreement entered into between the traders and Indians of any particular sum of money to be set apart for the payment of their debts before the paper was signed?

Answer. Yes; I believe it was four hundred thousand (\$400,000) dollars that they owed. They agreed upon two hundred and seventy-five thousand (\$275,000) dollars, a part being for the "half-breeds," a part for the traders, and a part for their removal and subsistence. This was the agreement between the traders and Indians.

Question. How much was intended for the traders?

Answer. I do not recollect right, but I believe it was two hundred and twenty thousand (\$220,000) dollars.

Question. Did the Indians sign this paper voluntarily, so far as you know?

Answer. They did, as far as I know.

Question. Did any of the chiefs or headmen speak in the council where the "Traders' Paper" was signed?

Answer. Yes; "Sleepy Eyes" addressed the commissioners and said that they had now satisfied the traders, and they wanted the traders now not to charge them so much for their goods.

Question. Did you hear any of the chiefs or headmen, after they had signed the treaty and "Traders' Paper," speak of having provided for their payment of their debts?

Answer. Yes; after they had adjourned the "Whistler" came to me and shook hands with me and said, you must not forget Louis Roberts; we owe him seven thousand (\$7,000) dollars. "Big Curly," the "Gun," and some of the principal men, said they were satisfied now that they had provided for their traders.

Question. Were you present at the distribution of the "half-breed" money?

Answer. Yes.

Question. What chiefs were present on that occasion that you recognized?

Answer. "Big Gun," "Curly Head," "Wah-nok-soon-ta," "Limping Devil," the "Orphan," "Sleepy Eyes," and "Red Iron."

Question. How was the distribution made?

Answer. Soon after the adjournment from the council where the treaty was signed they went about fifty or sixty yards from where they held their council. They then sent for Mr. Sibley and all the half-breeds who were about the place, and each chief named his own relations, and asked Mr. Sibley to put them down on the paper, which he did.

Question. Did "Red Iron" take any part in it?

Answer. Yes; he named all his relations.

Question. Had you a claim against the *upper* Sioux Indians?

Answer. Yes.

Question. Was it correct and sworn to ; and do you still assert it to be correct ?

Answer. Yes.

Question. Were you at the payment at Traverse des Sioux in the fall of 1852 ?

Answer. I was.

Question. Was there a "soldiers' lodge" erected there when you arrived there ?

Answer. As soon as I reached there I heard that there was a "soldiers' lodge ;" and I know of my own knowledge that there was one.

Question. By whom was it established ?

Answer. By "Red Iron" and his band.

Question. What was the object of this "soldiers' lodge ?"

Answer. It was to prevent the Indians from coming to the white people's lodges, tents, and houses.

Question. What effect had this "soldiers' lodge" upon the other chiefs ?

Answer. It prevented the chiefs from coming to see the white people.

Question. What was the conduct of the other chiefs in consequence of this "lodge ?"

Answer. They were afraid to go about as usual.

Question. From your own knowledge of the effect of that "soldiers' lodge" were any of the other chiefs intimidated from going into council with Governor Ramsey ?

Answer. Yes ; they were.

Question. Do you know that Governor Ramsey sent frequently to the chiefs to come into council.

Answer. Yes.

Question. Did they come when sent for ?

Answer. No ; they sent word by the interpreter that they were afraid of their own soldiers.

Question. For what purpose did Governor Ramsey send for them ?

Answer. It was to make out the "rolls."

Question. Were you there when "Red Iron" was arrested ?

Answer. No.

Question. Do you know whether any councils were held previous to the arrest of "Red Iron ?"

Answer. I do not recollect of any that were held.

Question. Did you hear any of the chiefs demand to have the money paid into their own hands ; and if so, what chiefs ?

Answer. I did ; "Red Iron," or "Limping Devil," one of them. I will not be positive which of them.

Question. Did they demand the whole of the money ?

Answer. Yes.

Question. What did Governor Ramsey do or say when they made this demand ?

Answer. He told them that if they would come and make their "rolls" that they would be paid their "*annuity money.*"

Question. Did you see any of the Wah-pa-toan or See-see-toan chiefs sign the receipt to Governor Ramsey for two hundred and fifty thousand (\$250,000) dollars ?

Answer. Yes ; I went to the council house, where I saw the "Little

Rapids" band. A part of them had signed it before I got there. After I got in the governor asked the Indians if they understood what they had signed, and asked Doctor Foster to read it. I explained it to the Indians, and asked if they understood it. They said "yes." I also saw "Limping Devil" sign it; and it was explained to him. I saw no others sign it.

Question. Did any of the other chiefs tell you that they had signed the paper; and what did they say about it?

Answer. They did. I saw in Mr. McLeod's store young "Sleepy Eyes," "O-ta-ke-ta," and "Wah-na-ta." They told me that they had just signed it.

Question. What was their language on that occasion?

Answer. They said, laughingly, we have signed that paper of the traders, and suppose you are all satisfied now.

Question. Was No-hope-ton there?

Answer. He was.

Question. Did you ever hear Governor Ramsey tell the chiefs, or any of them, either in or out of council, that he would not pay their "annuities" unless they signed a receipt, either at Mendota or the "agency," until they paid their debts?

Answer. I never did.

Question. When were the "annuities" paid at Traverse des Sioux?

Answer. I cannot exactly say, but it was between ten and twelve days after the governor arrived there.

Question. How long was it after their "rolls" were made out before they were paid their "annuity money?"

Answer. The same day, if I recollect right.

Question. Do you know of any traders who presented accounts that were excluded prior to the treaty of 1851?

Answer. I do not. I believe Mr. Wells had an account which was not presented. I do not know of any others.

Question. Do you think the distribution among the traders, as made at Traverse des Sioux, was a just one?

Answer. I believe it was.

Question. Were you present at the treaty of Mendota, in August, 1851?

Answer. Yes.

Question. Did the Indians, about the time of that treaty, acknowledge an indebtedness to the traders?

Answer. Yes; but I do not recollect the amount.

Question. Did the Indians and traders agree upon any sum of money which the traders were to receive in satisfaction of their debts?

Answer. Yes; ninety thousand (\$90,000) dollars.

Question. Did the Indians say how they intended to pay that ninety thousand dollars?

Answer. Yes; they were to name the persons themselves who they wanted paid, and they referred to that ninety thousand dollars. They expected to get it from the treaty they were making with the government.

Question. Did you ever hear Governor Ramsey, in any council in which you were the interpreter, or where you were present, tell the

chiefs of the Med-a-wa-kan-toan bands that he would not release their prisoners unless they signed a receipt for the "hand money," or paid their debts to the traders?

Answer. No.

Question. Do you know of any bribe, or offer of goods, horses, or other property, being made to any of these chiefs, either at Traverse des Sioux, or Mendota, or the agency, or at any other place, by Governor Ramsey, or any one for him, or with his consent and approval, to induce the Indians to sign the receipt for the "hand money" due to them, or to pay their debts to their traders?

Answer. No.

Question. Do you know of any acts of cruelty, harshness, oppression, or coercion of any kind, used by Governor Ramsey, or by any one in his behalf, to induce or compel the chiefs, either at Traverse des Sioux, or Mendota, or any other place, to sign his receipts or vouchers, or to pay their debts to the traders?

Answer. No.

Question. How many councils were held at Mendota during the payment of the *lower* bands of Sioux Indians?

Answer. Only one to my recollection; but I was not there.

Question. Were you present in any council where the Med-a-wa-kan-toan chiefs demanded their money of Governor Ramsey?

Answer. Yes.

Question. Who made the demand of Governor Ramsey?

Answer. "Wa-ba shaw" and Mock-pec-wee-chas-ta, or the "Cloud Man." I heard them say to the governor that they wanted *all* of their money.

Question. What did he mean by all their money?

Answer. I suppose he meant all the money they were to get under the treaty of August, 1851.

Question. What did Governor Ramsey say in reply?

Answer. He told them he could not pay all the money until they would get to their new homes.

Question. Were they unanimous in this demand?

Answer. No.

Question. Who were opposed to it in that council; what chiefs?

Answer. Tah-chan-koo-wash-ta, or Good Road.

Question. What did Good Road say?

Answer. I do not recollect exactly what he said. The governor, he said, had a good deal of talk, and had come to no conclusion. For his part, he wanted to pay the traders and to get their annuities.

Question. Who is the speaker in the councils, generally, for Mah-zah-ho-tah or Grey Iron's band?

Answer. Bad Hail.

Question. Did he speak in the council where Wa-ba-shaw demanded the money of Governor Ramsey?

Answer. Yes.

Question. Was he in favor of paying the money to the Indians or to the traders?

Answer. He was in favor of paying the money to the traders.

Question. To whose band does Medicine Bottle belong?

Answer. To Little Crow's band.

Question. Was Little Crow present at that council?

Answer. Yes.

Question. Did Medicine Bottle speak in that council?

Answer. Yes.

Question. Was he in favor of paying the money to the Indians or to the traders?

Answer. He was in favor of paying it to the traders.

Question. Did Little Crow dissent or object to it?

Answer. No.

Question. Was Little Six or Shak-o-pee present in that council?

Answer. Yes.

Question. Was his brother there?

Answer. Yes.

Question. Did he speak in that council?

Answer. Yes.

Question. Was he in favor of paying the money to the Indians or to the traders?

Answer. He spoke in favor of paying the money to the traders.

Question. Did Little Six or Shak-o-pee object to what he said?

Answer. No.

Question. What did Governor Ramsey advise them to do, after they had finished speaking, in regard to their money matters?

Answer. He advised them to pay their debts like white men, or something to that effect.

Question. Did he name any sum which he advised them to pay to their traders?

Answer. Yes; he advised them to pay seventy thousand dollars to their traders; and twenty thousand dollars to their "half-breeds."

Question. Were you present when any of the chiefs signed a receipt to Governor Ramsey for ninety thousand dollars?

Answer. Yes; "Little Crow," "Good Road," Shak-o-pee, and the "Star," signed in my presence.

Question. Was the receipt read and explained to the Indians before they signed it?

Answer. Yes; it was read by the governor, and I explained it to them.

Question. Did they sign it freely, and without coercion?

Answer. Yes.

Question. Were many of their people present when they signed it?

Answer. About twenty-five or thirty were present. The room was full. I did not count them.

Question. Were you present when Mock-pec-wee-chas-tah, or the "Cloud Man," signed it?

Answer. Yes.

Question. What other chiefs were present at that time?

Answer. They were all present, but Wa-ba-shaw and Wah-coo-ta; and the receipt was explained to the "Cloud Man," in the presence of all these chiefs.

Question. Was their attention directed to it, and did they say they understood it?

Answer. Yes.

Question. Were many of the Indians present?

Answer. The house was crowded.

Question. Where was it?

Answer. At the agency.

Question. Did you at any council, either at Mendota or Travers des Sioux, or the "agency," hear the chiefs request Governor Ramsey to appoint arbitrators, or any person or persons to whom should be submitted the accounts of the traders for examination and allowance?

Answer. No.

Question. Had the money under either treaty been paid into the hands of the Indians would they have settled their affairs, paid their just engagements, and retained money for their subsistence and removal?

Answer. I do not believe that they would have paid one dollar. I do not think that they would have kept any for their traders, subsistence, or half-breeds. They would have spent it all in purchasing horses, whiskey, and other goods, as they generally do when they get money.

Question. With your long intercourse with the Indians, what is your opinion of their veracity; and would it make any difference in their testimony, whether it was on oath or not, in any matter in which they had either feeling or interest, or conceived themselves interested?

Answer. I do not believe it makes any difference with them whether they are on oath or not; and I would not believe them if they were interested or had feeling, or conceived themselves to have an interest in regard to any matter whatever.

Question. Did you present a claim against the Med-a-wa-kan-toan Indians?

Answer. Yes, for nine thousand dollars. It was sworn to, and was correct.

Question. In Governor Ramsey's intercourse with the Indians, has his conduct been cruel and oppressive, or kind and indulgent?

Answer. He has always been very kind to them.

ALEXANDER FARRIBAULT, cross-examined by the government commissioners.

Question. Before the treaties with the Sioux Indians in July and August, 1851, had you been connected with the "fur company?"

Answer. Yes.

Question. How much was your claim against the *lower* bands, and how much against the *upper* bands of Sioux Indians?

Answer. Nine thousand (\$9,000) dollars against the Med-a-wa-kan-toan bands, or *lower* Sioux; eighteen thousand (\$18,000) dollars against the See-see-toan and Wah-pa-toan bands, or *upper* Sioux; and forty-three thousand (\$43,000) dollars against the Wah-pi-coo-ta band.

Question. Were you employed by Governor Ramsey as interpreter at these treaties in 1851?

Answer. I was.

Question. Was the "Traders' Paper" explained to the Indians in open council at Traverse des Sioux when they signed it?

Answer. No, not to my knowledge.

Question. Was the schedule to the "Traders' Paper," and the amounts they were to receive, attached to that paper before the Indians signed it?

Answer. I believe not.

Question. Was that *schedule* of debts to be paid to the traders explained to the chiefs in open council when it was attached to the "Traders' Paper?"

Answer. I do not remember that it was explained.

Question. When "Red Iron" and "Limping Devil" demanded that their money should be paid into their own hands, were all the chiefs who were then at Traverse des Sioux present?

Answer. I do not recollect.

Question. What did Governor Ramsey reply to this demand?

Answer. He replied that he could not pay them all their money, that if they would come and make their "rolls," he would pay them "annuities."

Question. Were not all the old chiefs present opposed to letting Governor Ramsey pay two hundred and ten thousand (\$210,000) dollars to the traders?

Answer. No.

Question. Which of them, in "open council," told Governor Ramsey to pay that sum to the traders?

Answer. I never heard any of them say so.

Question. Was it in *private* that some of them said that they were willing that Governor Ramsey should pay that sum to the traders?

Answer. I judged so by their every day talk and willingness to sign the papers.

Question. Did the chiefs at the payment at Traverse des Sioux, at the treaty, direct Governor Ramsey in open council to pay two hundred and ten thousand (\$210,000) dollars to the traders?

Answer. Not to my knowledge.

Question. Was not the soldiers' lodge intended to prevent the *money* from being paid to the traders by Governor Ramsey, and to prevent them (the chiefs) from signing the receipts?

Answer. I have not understood by any one that it was for that purpose.

Question. Do you not know, of your own knowledge, that this was the object, and the cause of all the trouble there?

Answer. I do not know personally, but I have reason to believe there was something to that effect.

Question. Did you ever hear any one chief in open council, under the fourth article of the treaty of 1851, direct Governor Ramsey to pay the traders two hundred and ten thousand (\$210,000) dollars?

Answer. Not to my knowledge.

Question. You say that you were at the payment at Mendota, at the agency of the lower Sioux Indians. Now, how long were the lower bands of Med-a-wah-kan-toan and Wah-pa-coo-ta Sioux at Mendota and the agency before the payment of their annuities?

Answer. I do not recollect the time, but I guess about ten or twelve days.

Question. What was Governor Ramsey doing during that time?

Answer. I do not know.

Question. Did he hold open councils with the Indians every day except on Sundays?

Answer. No.

Question. What were they all waiting for?

Answer. The Indians were waiting for their annuities.

Question. Who had the annuity money, Governor Ramsey or agent McLean?

Answer. I believe Major McLean, but I do not know exactly.

Question. Do you not know that Governor Ramsey desired to get the receipts from the chiefs for the traders' money before the annuities were paid to the Indians?

Answer. I never had any conversation with the governor, so I do not know.

Question. Did not Governor Ramsey tell the traders that he could not pay them until he procured the receipts from the chiefs as his security?

Answer. I have never heard him say so.

Question. Did you not assist Governor Ramsey to get the receipts from the Indians for the traders' money?

Answer. No.

Question. Did not the governor ask you to assist him in getting them?

Answer. Never.

Question. Did you assist anybody to get these receipts for Governor Ramsey?

Answer. For my own interest I went to the Indians and advised them to sign the receipts.

Question. Did you offer them, or any one of them, anything to induce them to sign it?

Answer. No.

Question. Did others offer them anything in your presence?

Answer. Not in my presence.

Question. Were presents offered to them at any time before the signing of the receipts?

Answer. Not to my knowledge.

Question. Did you ever hear the Med-a-wah-kan-toan chiefs in open council, before they signed the receipt to Governor Ramsey for ninety thousand (\$90,000) dollars, direct him to pay the traders seventy thousand (\$70,000) dollars?

Answer. No.

Question. Do you know whether there were any provisions issued to the Indians before they signed this receipt for the ninety thousand (\$90,000) dollars?

Answer. I do not know of my own knowledge.

Question. You say that Bad Hail is the speaker for Gray Iron's band, and that he spoke in a council in favor of paying the traders. Now, please say if he had not a son confined in jail at the fort, for the murder of certain Chippewa Indians, by Governor Ramsey's order at that time?

Answer. He had, as I understood.

Question. Was that son released after that without a trial?

Answer. I do not know.

Question. Was he released afterwards by Governor Ramsey?

Answer. I do not know.

Question. Did you not see him at large shortly afterwards?

Answer. No.

Question. How long before he was seen at large by you?

Answer. It must have been six or seven months.

Question. Had you heard of his release before that time?

Answer. Yes.

Question. How long before that time?

Answer. It was some time about the payment that I heard so.

Question. What per centage did you pay on your claims?

Answer. Fifteen per cent.

Question. Was there any sum paid to you for your services in this matter of the treaty and payment to the traders?

Answer. No.

Question. In what kind of money was your account paid to you by Hugh Tyler?

Answer. In checks and bank notes.

Question. Was there any understanding or agreement by you to pay Hugh Tyler this fifteen per cent. before the time of the payment?

Answer. There was an understanding that a per centage was to be paid to Mr. Tyler, but the amount was not agreed upon. There was such an understanding with all the claimants.

Question. What was the object of the establishment of the "soldiers' lodge" by "Red Iron" and his band. Was it not to prevent the payment of the treaty money to the traders?

Answer. I understood that it was their object to prevent the Indians from going to the white men's lodges or houses to hold any councils.

Question. Of this two hundred and fifty thousand (\$250,000) dollars, due to the *upper* bands of Indians of treaty money, was not two thousand (\$2,000) dollars, or some such sum of money, paid or agreed to be paid to you out of the fifteen per cent. deducted by Hugh Tyler?

Answer. I do not recollect to have made any such agreement, nor do I recollect ever to have received one cent of that money.

Question. Did you hear "Red Iron" in "open council," when several chiefs were present, say to Governor Ramsey, that he hoped that they would not be served in the payment of this money, as had happened with the Med-a-wa-kan-toans, by paying their money to the traders; but hoped that he would pay it to them in their own hands?

Answer. I heard him tell Governor Ramsey that he hoped that they would not be served as the Med-a-wa-kan-toans had been; that he wanted all the money paid to them; and that they would then do what they thought proper with it.

Question. Were you present at the time when "Red Iron" was broken of his chieftainship by Governor Ramsey?

Answer. Yes.

Question. Did you hear "Red Iron" say to Governor Ramsey in "that council," that the object of the "soldiers' lodge" was to prevent single individuals, chiefs, and young men, from going to "councils"?

at night to sign papers; that their object was to have *all* the chiefs to go to "council" together, that they might all know what was done. Please state in your own language what was said at that time upon that subject?

Answer. I was not the interpreter, and did not hear what was said.

Question. Were the "annuity pay rolls" made out there in "open council" when the governor was present?

Answer. My recollection is, that these "pay rolls" were made out by the agent, Major McLean. Governor Ramsey and Major McLean occupied different places for their "councils."

Question. What was said and done about these "pay rolls," at any of the "open councils," when Governor Ramsey was present?

Answer. I do not recollect of anything.

Question. Was the Traders' Paper explained to the chiefs in "open council" at any time before it was signed; and if so, by whom was it explained.

Answer. I was outside, and did not see the paper then; but I had seen it before. I heard them explain that there was such an amount for the traders, such an amount for the half-breeds, and such an amount for themselves. The explanation was rendered by Joseph Renville and Gabriel Renville.

Question. Was this at the same time, and in the same "council," that the provisions of the treaty were explained to them; and when they accepted the propositions of the commissioners?

Answer. It was in the *same council*. There were no government officers present.

Question. May it not have been the terms of the treaty that was explained to them, and not the "Traders' Paper," or was it both?

Answer. It was not the treaty.

Question. What chiefs were present at the "council" when these explanations were made?

Answer. "Big Curly," "Limping Devil," the "Orphan," "Little Rapids" chief, and old "Sleepy Eyes." These are all I *recollect*.

Question by Governor Ramsey's counsel.

Question. What was the value of the drafts which you received in payment of your claims?

Answer. They were at par value, and as good as gold with me. I preferred them to gold. I was offered gold, but preferred the drafts.

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Examination of Captain JAMES MONROE, of the United States army,
by the counsel of Governor Ramsey.

Question. Did you attend at Traverse des Sioux at the payment in 1852, in the command of a company of United States troops?

Answer. Yes. I was in command of a United States company of infantry, and five dragoons attached. I arrived at Traverse des Sioux on the 19th of November, 1852.

Question. What was the state of things among the Indians when you reached there?

Answer. I received from the superintendent of Indian affairs (Governor Ramsey) an official communication *orally* to the effect, that chief "Red Iron" had formed what is called a "war lodge," upon which he had interfered with the superintendent's communication with the Indians there; that he had forbidden them from coming and holding any communication with him as superintendent. This is the purport of what he stated to me.

Question. Now state the condition of things as you found them there at that time?

Answer. Upon this information received from the superintendent I crossed the river immediately with my command, and commenced establishing it in a central position in the town of Traverse des Sioux at the junction of two roads. While we were engaged in pitching tents, a considerable body of Indians, from forty to fifty in number, came down from the house of Mr. Sweetser and attempted to pass directly across the line; I forbid their passing; and to the first direction or order not to pass they paid no attention whatever, nor did they retreat until the command was thrown across their path, (the way they were coming;) and there was no option left them but to retire or to come to collision with the troops.

Question. What was their manner and conduct at the time they approached your lines?

Answer. Their manner was, they marched straight on the line and one of the Indians cocked his gun, when one of the sergeants drew his sword. They did not advance any further after the line was thrown across. Their walk was a tolerably rapid gait. I did not notice any signs of excitement as they came down.

Question. Were they armed?

Answer. They were.

Question. What conversation took place between you and the chief "Red Iron," when he came up to your line?

Answer. None, myself.

Question. What communication did you send to "Red Iron"?

Answer. I sent a message, through Lieutenant Kelton, with an interpreter, that the chief, "Red Iron," was at liberty to pass in to the superintendent, but that he could not be followed by a large body of armed men. The chief and his men then turned and went toward Mr. Sweetser's house, or in that direction, except one Indian. When the word was received by the Indians, there was a general reply of "No," that the chief should not go in alone. After the Indians had reached the elevation above, I heard two or three guns fired. This Indian, who remained, drove off a number of others who were standing around.

Question. Do you know of Governor Ramsey having sent for Red Iron to come in, to induce him to break up his "soldiers' lodge"?

Answer. Governor Ramsey sent Lieutenant Kelton, with an interpreter, to Red Iron's camp, to tell him that he wished him to come by the hour of 10 o'clock the following day.

Question. Do you know how often he sent for Red Iron?

Answer. I know but of that one time.

Question. Did he say he would come?

Answer. It was so reported to me by the officer.

Question. Did he come at the time fixed?

Answer. He did not come at that hour.

Question. Was there a detachment of United States troops sent to bring him in?—and when was it sent?

Answer. About an hour after the time mentioned, a party of troops was sent for him, and brought him in.

Question. Did you see him and his band, about the hour fixed at which he was to come in, at any place near to Governor Ramsey's quarters?

Answer. I saw, about that hour, passing from the direction of Red Iron's lodges, along the front of Traverse des Sioux, a number of Indians, said to be Red Iron and his band.

Question. Were you present when he was arrested?—and what took place in that council?

Answer. I was present when he was brought to the camp, and told him that he must go to the governor, and that he would select three or four of his people to go in with him. He declined to select any; but upon my telling him that I would have to designate them myself, unless he did, he pointed out three or four, who went in with him to the governor's quarters. Governor Ramsey said to him, "Why have you not come in, on my sending for you, as you promised to do?" The chief, Red Iron, replied, "I am now in." The governor then said to him, "You have formed a *war lodge* here, which has conducted itself in a very disorderly manner; you have threatened and intimidated the other Indians, and prevented them from holding communication with the officers of the government, who are here for that purpose;" and more of the same import. Governor Ramsey then concluded by saying, "*You are broken as a chief, and I now break you*; and this officer (pointing to myself) will keep you a prisoner." I immediately put the chief in a room, and put a sentinel over him.

Question. When was "Red Iron" released, and how was he treated during his confinement?

Answer. To the best of my recollection, he was released the following day. During his confinement he was treated with lenity, so far as was consistent with secure keeping.

Question. What was the effect of his movements on the other chiefs, prior to his arrest, so far as you observed?

Answer. I do not know.

Question. In Governor Ramsey's intercourse, was his conduct harsh and tyrannical?

Answer. Not at all, so far as I observed.

Question. What prevented the Indians from coming in to have their "pay rolls" made out?

Answer. I do not know.

Question. Did the "annuity payment" take place immediately after the "rolls were completed?"

Answer. I believe that it did.

Question. Did Governor Ramsey show an anxiety with the chiefs to have the rolls made out?

Answer. I believe I heard him urge that point once or twice, saying that the payment could not take place until they were completed.

Question. Was "Red Iron" released as soon as his soldiers came in and informed Governor Ramsey that the "soldiers' lodge" had been destroyed, or broken up?

Answer. The day after "Red Iron's" arrest, a number of his men came in, and one, said to be the brother, told Governor Ramsey that they now had no chief, that they had broken up the "lodge" soon after the chief was released.

Question. What was your understanding of what the clamor among the Indians was about?

Answer. I believe the clamor was in regard to the amount set aside for the payment of their debts. I got this impression from what I heard from the Indians themselves.

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HERCULES L. DOUSMAN, sworn and examined as a witness on the part of Governor Ramsey.

Question. Where do you reside?

Answer. At Prairie du Chien, in the State of Wisconsin.

Question. Have you resided in the Indian country, and how long?

Answer. I was born in the Indian country, and have resided there ever since, or until Wisconsin was sold by the Indians.

Question. Were you present at Traverse des Sioux, at the treaty in July, 1851?

Answer. Yes.

Question. During the pendency of that treaty, did you hear the chiefs and headmen acknowledge their indebtedness to their traders?

Answer. The amount due to the traders was talked of on several occasions in the presence of several of the chiefs and the traders. The aggregate amount was not to my knowledge stated, but, that it was a large amount. The Indians and traders agreed upon the sum of \$210,000, in full discharge of all their indebtedness, although the claims were greater than that amount.

Question. Were the chiefs generally present when this agreement was made between the Indians and the traders?

Answer. I should think a majority of them were.

Question. Were the traders generally present?

Answer. Yes; most of the principal traders.

Question. Were you present when the "treaty" and "Traders' Paper" were signed by the Indians?

Answer. Yes.

Question. Had the "Traders' Paper" been explained to them at any time before it was signed?

Answer. On the morning previous to the signing of the treaty the Indians had a "council" at a tent near the "council house," where the object was to explain it. Whether it was explained or not I do not know.

Question. When they left that tent where did they go to?

Answer. Directly to the "council house."

Question. By what authority was the \$210,000 distributed among the traders?

Answer. By agreement between the Indians and the traders that they would take that amount.

Question. Who made the distribution?

Answer. There was a committee appointed by the traders to divide it.

Question. Was this distribution a fair and equitable one?

Answer. It was, under all the circumstances.

Question. Was there any amount set apart for their half-breed relations?

Answer. Yes; there were forty thousand dollars, (\$40,000.)

Question. Were you at the payment at Traverse des Stoux in the fall of 1852?

Answer. I was.

Question. What do you know about the "soldiers' lodge" at Traverse des Sioux, and by whom was it established?

Answer. The "soldiers' lodge" was established when I got there. All, or nearly all, the soldiers who belong to Red Iron's band were there. I saw "Red Iron" at the head of his men, parading up and down; I mean that they were going in a body from place to place, from lodge to lodge, and from trading-house to trading-house.

Question. What was their conduct and manner on that occasion?

Answer. It was considered calculated to intimidate the Indians, and was more rude towards the whites than Indians are in the habit of using towards the white people.

Question. Did you see the Indians approach Captain Monroe's company of United States soldiers?

Answer. Yes. They were all armed, and came down with every demonstration that usually is made by Indians, hallooing, &c., and all apprehended that there would be a conflict. I also saw the soldiers drive off the Indians from around lodges in the evening, for what purpose I do not know.

Question. Were you present in a council where "Red Iron" and his band met Governor Ramsey, and what was their conduct at that time?

Answer. The council was held in a small room of the governor's, and I was on the outside. There was a good deal of excitement among the young men, and a good deal of violent talking, but I could not understand them from my knowledge of Indian character.

Question. Do you know of Governor Ramsey's having frequently sent for the chiefs to come into council?

Answer. I heard Governor Ramsey on several occasions tell messengers to go and call in the chiefs.

Question. Did you know his object in having them brought in?

Answer. To have them come in and have the "rolls" taken, and to get their "annuity" money.

Question. Did the chiefs come when sent for?

Answer. No; they did not come in a body, they came in one at a time.

Question. What reason did they assign for not coming?

Answer. I heard on two or three different occasions that the reason why the chiefs did not come in was that their bands were small, and

that they did not want to do anything without them; that their bands not being there they could not cope with the "soldiers' lodge."

Question. Do you know of Governor Ramsey's having sent for "Red Iron?"

Answer. I think he sent by Lieutenant Kelton, and once or twice beside that, requesting him to come in, as he wished to have a talk with him. He did not come when sent for, to my knowledge.

Question. Were you there when he was brought in by a detachment of United States soldiers?

Answer. Yes.

Question. What occurred after he was brought before Governor Ramsey?

Answer. I think Governor Ramsey asked him why he did not come in when he sent for him. He replied, that he was prevented from coming by the soldiers of his band. The governor said that he had behaved badly, and that he should have come when he sent for him; that he did not treat the government officers with proper respect; that if he could not control his soldiers, there ought to be some one at the head of the band who could do it. The governor then told him that he should keep him in confinement until the "soldiers' lodge" was disbanded and broken up. He was then put in confinement in a house near where we all resided. I think that he was released the next day, but I am not positive. He was well treated during his confinement, and was full as well off as any of us, if not better.

Question. How soon were the Indians paid their "annuities" after the "pay rolls" were completed?

Answer. I think they were paid as soon as Major McLean said he had completed the "rolls."

Question. What took place between Governor Ramsey and Major McLean?

Answer. I heard Governor Ramsey ask Major McLean if he had completed his "rolls."

Question. Do you know whether Governor Ramsey was anxious to have the "pay rolls" made out?

Answer. I heard him several times express great anxiety to have them made out as soon as possible.

Question. Look at the power of attorney on Senate Doc. No. 29, pages 29 and 30, and say whether you are a subscribing witness to that paper or not?

Answer. Yes, I was a subscribing witness, and explained it to those who could not speak English.

Question. Do you know of Joseph Rienville presenting an account against the upper Indians, and did he swear to it in your presence.

Answer. I saw Governor Ramsey swear him to the account.

Question. Were you at the treaty at Mendota in August, 1851?

Answer. Yes.

Question. Do you know of the Indians, during the pendency of the treaty, having acknowledged an indebtedness to the traders?

Answer. I know that the matter of the debts due by the Med-a-wa-kan-toan bands was the subject of frequent conversation.

Question. Was any amount fixed upon which the traders agreed to receive in full acquittance of their debts?

Answer. I do not know, from my own knowledge.

Question. What amount of indebtedness did the Indians acknowledge?

Answer. After the treaty was signed, there was a "council" held between the traders and the Indians, in which a list of the debts was laid before the Indians. They assented to most of them, but some they objected to. The amount they assented to in that "council" exceeded \$100,000, to the best of my knowledge.

Question. Did they ever say anything to you about any provision being made for their traders?

Answer. I never had any conversation with them on that subject.

Question. From your long intercourse with the Indians, what is your opinion of their veracity; and would it make any difference whether they were sworn or not?

Answer. With most Indians I should think it would make very little difference whether they were sworn or not; and it would not prevent them from telling a falsehood, if it would subserve their interest.

Question. Would you believe an Indian on oath, if he had either feeling or interest in the matter?

Answer. I would not, if he had deep feeling or interest.

Question. Did you ever confederate with Governor Ramsey to absorb the whole fund, to the exclusion of meritorious creditors?

Answer. No; neither with Governor Ramsey or anybody else, nor of any part of the fund, in any manner whatever.

Question. Will you explain why your name appears in connexion with Mr. Bailey's on the traders' distribution list?

Answer. Mr. Bailey had charge of an "outfit" at Mendota, to trade with the Sioux Indians up to 1834. Mr. Bailey presented the account in the name of "Bailey's outfit." I acted as the agent of the "American Fur Company" in that matter, and represented their interest at that time, at Traverse des Sioux, in this particular transaction.

Question. Why was the account presented by Mr. Sibley, as agent for the American Fur Company, sworn to by you?

Answer. Up to 1834 the "outfits" to the Sioux country were made at Prairie du Chien. I was knowing to the different "outfits," and the accounts were rendered to me by the different clerks from 1826 to 1834, the time I was in the country.

Question. Do you know of any claims that were presented against the *upper* bands that were excluded?

Answer. No.

Question. Do you know of any traders' claims prior to the year 1851 that were *not* presented?

Answer. No, I do not from 1821 to 1851.

Question. Do you know of any acts of harshness, menace, or cruelty, on the part of Governor Ramsey to induce them to sign receipts, or to pay their debts?

Answer. No; not to my knowledge.

Question. Do you know of any bribes, or presents, or offers, of any

improper inducements, to get these chiefs to sign receipts, or to pay their debts to the traders?

Answer. No.

Question. Do you know of any chiefs, either in or out of council, ever applying to Governor Ramsey to appoint arbitrators, or any other person or persons, to examine into the correctness of the traders' accounts.

Answer. I never was present where any such proposition was made.

Question. Did you ever hear the chiefs at Traverse des Sioux, or Mendota, or the agency, demand the money of Governor Ramsey?

Answer. I heard "Limping Devil," and one or two others, come in and have a council, in which they said to Governor Ramsey, that they wanted all the money put on the floor, as they wanted to see the whole of it, and that they might tell what to do with it. I have no recollection of being present at any other time. Governor Ramsey asked them if they wanted their "annuity money," and they said "*they wanted all that was coming to them—the whole of their money.*"

Question. Had the whole of this money been paid into the hands of the Indians, would they have settled their affairs, paid their just engagements, and retained a sufficient sum for their removal and subsistence?

Answer. If the whole amount had been paid to them in bulk, it would have produced a great dissention among them—quarrelling and fighting—and I think it very questionable whether they would have paid any of their engagements; and as to their removal and subsistence, I think they would have been different from any Indians I know anything about, if they had kept any for a future day. I think they would have spent it all.

Question. Were you present, or did you hear Governor Ramsey tell any of the chiefs that he would not pay their "annuities," or release their prisoners, unless they signed certain receipts to pay their debts to the traders?

Answer. No.

Question. Did you see any drunken Indians about Mendota, while you were there?

Answer. No. I was pretty much all the time about Mendota, almost every day.

Question. Did you ever hear any one say, that, unless the traders signed a power of attorney to Hugh Tyler, that the money would be paid directly to the Indians?

Answer. No.

Question. Did you ever hear the remark made in the presence of Governor Ramsey, by Hugh Tyler, "damn them, I think we will fetch them; we will commence paying a few," &c?

Answer. Hugh Tyler, Governor Ramsey, and myself, slept up stairs at Mr. Huggins's, and we were frequently up there together, and may have come down together; but I never heard that remark made. I may have walked right out.

HERCULES L. DOUSMAN, cross-examined by the government commissioners.

Question. Did you have to pay a per centage on your claims to Hugh Tyler?

Answer. I paid "*fifteen*" per cent. on a small claim.

Question. Were you, before the treaties of 1851, interested with the "American Fur Company," as a partner in any way?

Answer. Yes. From 1834 to 1841. The "American Fur Company" then closed up its concerns, and transferred their business to Pierre Chouteau, jr., and Co., and I was there interested with the latter company, from 1841 to 1846, as a partner and factor both. I received a part of the profits, and a salary besides.

Question. Was you interested in the claim presented by H. H. Sibley, as agent for the "American Fur Company," for \$144,000?

Answer. The claim belonged, when I closed in 1841, exclusively to them, but by a subsequent agreement, I was to get a share in the amount collected for my services in collecting the claim, and in attending to it. The claims from 1841 to 1846 I relinquished to Pierre Chouteau, jr., and Co., and had no interest in them.

Question. What was to be done with the per centage collected from the traders and half-breeds by Hugh Tyler?

Answer. I understood it was to be applied to the payment of Mr. Tyler for his services in the procuring the ratification of the treaty. and such other aid as he could render in the Territory; also, for the payment of agents and attorneys in Washington city, and also to defray the expenses in procuring the ratification of the amendments to the treaty.

Answer. Was not some of it to be paid for securing to H. H. Sibley, or his representatives, the sum of \$200,000, out of the monies to be paid under the treaty of Traverse des Sioux, of July 23, 1851?

Answer. No. I have no knowledge of any of the per centage being paid for that purpose.

Question. Was not the sum of \$13,000 paid to some person for the purpose of securing to H. H. Sibley, or his representatives, the sum of \$200,000, under the treaty of Traverse des Sioux, of July 23, 1851?

Answer. I never saw it paid. It may have been paid, but I never paid it, or received it, or saw it paid, nor was it paid to any person connected with the Indian department.

Question. Did such a sum or some part of it come into your hands for the use or credit of any other person on such account, or for such services?

Answer. I answer no.

Question. Was not the sum of \$10,000, or some part of that sum, paid in pursuance of an agreement in writing?

Answer. I cannot answer, for I do not know.

Question. Was there a contract entered into in writing between any person or persons to give to one of the contracting parties the sum of \$10,000 to obtain from the chiefs such authority in writing as would enable H. H. Sibley, or his legal representatives, to obtain from the

United States the sum of \$200,000, in payment and discharge of the indebtedness by the Indians, parties to the treaties of 1851?

Answer. "*I decline to answer this question, under the advice of counsel.*"

Question. Did Governor Ramsey tell you that he had deposited the Sioux money, under the treaties of 1851, in any bank in the city of New York?

Answer. He did. He said he deposited it all, except what he brought with him, in the Merchants' bank of New York and the Bank of Commerce.

Question. How much paper money did he bring with him?

Answer. I never heard him say how much.

Question. Did you ever hear Hugh Tyler say who were the employed agents in Washington to secure the ratification of the treaties of 1851?

Answer. No.

Question. Was any of this per centage paid to persons assisting to get the necessary papers signed by the Indians to settle up these Sioux payments?

Answer. I did not pay it myself; but I have reason to believe it was so paid for this purpose, and to procure the ratification of the treaties.

Question. Did Governor Ramsey know that employed agents were at work in procuring the recognition of debts to the traders by the Indians, and to get the necessary papers prepared for that purpose?

Answer. I do not know that Governor Ramsey knew of any person being so employed except Mr. Tyler.

Question. Do you know whether Hugh Tyler ever deposited the proceeds of that per centage in any bank or other place, in any of the States, from what Tyler himself or his employees told you, or from what you know yourself personally?

Answer. I have no knowledge on the subject.

Question. The per centage amounted, as is estimated, to near \$60,000. Now, did the treaties and the incidents of its ratification, in your judgment, cost that sum, or the half of it, if employed in a proper manner?

Answer. There was but a small portion of it paid out in this country. What amount was paid out in Washington, or how it was spent, I do not know. I don't know what these things cost in Washington city.

—

S. R. RIGGS, sworn and examined as a witness on the part of Governor Ramsey.

Question. Where do you reside?

Answer. At Lac qui Parle.

Question. How long have you resided among the Sioux Indians?

Answer. Sixteen years past.

Question. Do you speak and write the Dakota or Sioux language?

Answer. I do.

Question. Were you employed by Commissioners Lea and Ramsey at the treaty of Traverse des Sioux in 1851?

Answer. I was.

Question. Did you witness the signing of a paper by the Indians at the same time they signed the treaty?

Answer. I did.

Question. What was the character of the other paper?

Answer. It was for the purpose of distributing the \$275,000, or that portion of it which went to the traders and half-breeds.

Question. When they signed this paper did the Indians understand it?

Answer. I think the chiefs and a major part of the braves did.

Question. Did you know the contents of that paper when you signed it; and in your talks with the Indians, in the councils which you attended, did you interpret to them that the object of the \$275,000 was for the payment of their debts, for their half-breeds, and for their removal and subsistence, and did they so understand and agree to it?

Answer. I never had read or seen that paper when I signed it, but I supposed I knew it to be a paper making arrangements for the distribution of that portion of the \$275,000 which went to the traders and half-breeds. In my talks with the Indians, at the councils which I attended at their own lodges, I did interpret to them that the object of the \$275,000 was for their traders, half-breeds, and for their removal and subsistence. I think they understood it, and they agreed to it.

Question. Do you know of councils being held in which the traders' claims and the matter of the 'Traders' Paper were before them for consideration?

Answer. I knew such councils were being held, for I was invited to attend them by Indian chiefs and half-breeds, but declined.

Question. Will you state any conversations held with the chiefs, having regard to the payment of their debts and the division of the money set apart for the traders?

Answer. It is two years or more since I talked with them. I remember a conversation I had with Big Curly Head, of various applications made to him, on the part of half-breeds and some of the smaller traders, desiring him to secure to them as large a part of this money (the \$275,000) as he could.

Question. Did you hear any of the chiefs after the treaty say that they had made an arrangement with the traders, by which the traders were to divide the money among themselves?

Answer. I heard Sleepy Eyes say that, as they had now made an arrangement with the traders to pay their debts, he hoped that they would not charge such high prices for their goods in future. The Orphan said something to the same effect. This was in the council at the signing of the treaty. I heard Big Curly Head and his men talk of the matter as being settled.

Question. Were the chiefs generally present when Sleepy Eyes spoke as you have stated?

Answer. They were, or all that were there.

Question. Was Big Curly Head present at the payment at Traverse des Sioux in the fall of 1852?

Answer. He was not.

Question. See page 112 of the manuscript copy of evidence taken by the committee of the United States Senate, and the receipt or direc-

tion of Big Curly Head at Lac qui Parle, as witnessed by you and Lorenzo Lawrence, and say how that paper came to be made.

Answer. On or about the 13th of January, 1853, Big Curly Head and four of his principal men came to my house and said they were on a matter of business; that one of their number had been at the payment at Traverse des Sioux, and would have there signed the paper which the governor wished them to sign, in regard to the distribution of the traders' money, but had been prevented from doing so by Red Iron and his band; and that now, after consultation among themselves, they were desirous to send some paper signifying their assent to the arrangement proposed, if any further arrangement or evidence was necessary, and if I thought it was best. I told them that it was a matter altogether between themselves and the traders and half-breeds; that I was satisfied the traders had just claims against them, which they had acknowledged, and I thought it was their duty to do anything necessary to the payment of that money, to meet the demands against them; and that, although I should not have suggested it to them, I thought it was right that they should make out the paper as they proposed. I sent the copy to Governor Ramsey which is found on the page and paper above referred to.

Question. Do you know of any influences being used to induce the Indians to sign the "Traders' Paper," and to acknowledge their indebtedness to the traders.

Answer. I do not know of any.

Question. Do you know of the traders and Indians having agreed upon the sum to be received, in full acquittance of their claims against the Indians; if so, what amount?

Answer. I did know, prior to the treaty, the precise part of the \$275,000 which was to be paid to the traders.

Question. Do you know of a council being held *after* the treaty, for the purpose of distributing the "half-breed money"?

Answer. I knew such a council was held, but I was not present.

Question. What is the influence of the "braves" over their chiefs?

Answer. The power of the "braves" is always greater than that of the chiefs. They consider the land as belonging to them; and I suppose they can, at any time, when any considerable number of them are united, compel their chiefs to do as they think best.

Question. From your long intercourse with the Indians, what is your opinion of their veracity; and would it make any difference whether they were sworn or not?

Answer. Their being sworn would make no difference, nor would I believe them if they supposed they had an interest at stake. I speak generally, but there may be exceptions. A chief's popularity consists in his ability to beg and lie, and make "feasts."

Question. As a general thing will one chief follow another in what he says or does, when in "council" together.

Answer. They are very much in fear of each other; and consider the person taking the first step as the author or originator of the proposition, and hold him responsible for the act; although they generally follow without hesitation.

Question. Had the money been paid into the hands of the Indians.

would they have settled their affairs, paid their engagements, and retained a sufficient amount for their removal and subsistence?

Answer. I do not think they would. I think they could not have made any division among themselves. They would not have paid but a very small portion of it to any of the traders. I think they would not have made anything like an equitable division among the "half-breeds;" and it would have resulted in fighting and bloodshed.

Question. Why is it that where the papers are executed at different times the names of different chiefs appear to them?

Answer. Because they have never all been present at any one time. At the treaty at Traverse des Sioux there was but one northern See-toan present, (the "Orphan.")

Question. In his intercourse with the Indians has Governor Ramsey's conduct been harsh and cruel, or otherwise?

Answer. It has been generally kind.

S. R. RIGGS, cross-examined by the government commissioners.

Question. Did you ever hear the chiefs in "open council" direct Governor Ramsey to pay to the traders \$210,000, under the treaty of the 23d of July, 1851?

Answer. No.

Question. Did you not hear the chiefs "in open council," after they had signed this "Traders' Paper," and before Governor Ramsey had left Traverse des Sioux, tell him that they had a paper which protested against the payment of the money to the traders?

Answer. I never did.

Question. Did you ever see a "*protest*" signed by the chiefs and headmen, protesting against the payment of the traders?

Answer. I never did.

Question. Was the paper signed by you as a witness, and called the "Traders' Paper," ever explained to the Indians in "open council," *where* they signed it, and *when* they signed it?

Answer. It was not explained to them *where* they signed it, or *when* they signed it. The circumstances of the case prevented it.

Question. Was the *list* or *schedule* of the amounts to be paid to the traders attached to that paper when you witnessed it, or when the Indians signed it?

Answer. It was not.

Question. Did you not think when you first signed it, and did you not say so, that you thought it was a copy of the treaty?

Answer. I never said so, or thought so.

Question. Did you aid the traders in getting the Indians to sign it?

Answer. I believe, in one or two instances, I said to an individual or individuals, "they say you will sign this also."

Question. Did you have a claim as a trader?

Answer. No.

Question. Was not you allowed on that "Traders' Paper" the sum of eight hundred dollars, or about that sum?

Answer. The "*American Board of Foreign Missions*" had a claim against the *upper Indians*, for some cattle killed by the Indians, of

between eight and nine hundred dollars, which was handed in at time of the treaty, and eight hundred dollars was allowed upon it.

Question. Did the traders not tell you that this claim should be allowed, if you would assist in getting the Indians to sign that paper and for other services?

Answer. They never told me anything of the kind. They told they would take the paper, and it should fare as the rest of the claim. I never was offered any bribe or anything of the kind.

Question. Who told you to stand by the "Traders' Paper," and point the Indians to it to be signed?

Answer. No one told me so; and I did not do it, except in the instances above alluded to.

Question. Who paid the money to you which was allowed on Traders' Paper?

Answer. Mr. H. H. Sibley.

Question. In what kind of funds were you paid?

Answer. What I received personally was paid in New York bank notes.

Question. You say that the Indians were told by you that \$275,000 was to pay their traders, &c. Now, was not that *before* the treaty was signed?

Answer. Yes. I was explaining that portion of the treaty at the time.

Question. Do you believe that a Dakota or Sioux Indian ought to be paid large sums of money?

Answer. No; I do not.

Question. Do you not think the law wrong to pay Indians *per capita*?

Answer. Not if the distribution is made by the agent.

Question. The treaty provides that this \$275,000 shall be paid the chiefs, in such manner as they *hereafter* in "open council" request. Now, if they in "open council" did request Governor Ramsey to pay this money to themselves, ought it to have been so paid?

Answer. It ought to have been done in order to fulfill the literal language of the treaty; but it could not have been done without endangering both property and life.

Question. Were not the Indians, both before and at the time of the treaty, uniformly given to understand that the \$275,000 mentioned in the treaty, *less* the amount for removal and subsistence, was for the benefit of the traders and half-breeds alone; and that they (the Indians) had no further control over it?

Answer. Yes, they certainly were.

Question. Was the money paid according to the first clause and article of the treaty of the 23d July, 1851?

Answer. It was not so paid; but it was paid according to the common understanding at the time.

Question. Did Governor Ramsey know that the traders expected to get all this \$275,000, except enough for the removal and subsistence for the first year?

Answer. I do not know.

Dr. THOMAS FOSTER, sworn and examined as a witness on the part of Governor Ramsey.

Question. Were you at the treaty of Traverse des Sioux in July, 1851?

Answer. I was.

Question. In what capacity did you attend the treaty of 1851?

Answer. I was appointed secretary of the commissioners at Washington city in the fall of 1850, and in that capacity attended all the negotiations with the Sioux Indians at both treaties.

Question. Were you present any time at Traverse des Sioux, when the chiefs "in council" admitted their indebtedness to their traders?

Answer. I was at various times. The Indians, traders, and commissioners were together.

Question. What was said in those "councils?"

Answer. The Indians spoke of having incurred large debts to their traders, through a series of years; and that they had promised to pay them when they sold their land. The Indians admitted the claims of their traders to a very large amount, and assented to the amount claimed by the traders as correct, amounting to over \$400,000.

Question. Did they agree to any sum which was to be received in full satisfaction by their traders?

Answer. I knew that the Indians agreed to allow their traders in commutation of all their demands in full the sum of \$250,000, forty thousand of which, however, the traders were to permit to go to the "half-breeds."

Question. Was the "Traders' Paper" explained to the Indians before it was signed by them?

Answer. Not that I heard.

Question. Were either it or the treaty explained in that council where it was signed by the Indians?

Answer. The treaty was fully and clearly explained by Mr. Riggs, article by article, and also read to them from a translation previously made by him in the Dakota language; but I did not hear the "Traders' Paper" explained aloud, nor could it have been done without interrupting the public business.

Question. Did they sign the "Traders' Paper" freely and voluntarily?

Answer. After they had signed the treaty, each Indian turned away from the commissioners' table and went in the direction of another table several yards distant, at which sat agent McLean, and Joseph R. Brown, and there signed the "Traders' Paper." Mr. Brown *holding the pen*. They all appeared to go as if they knew what was to do next, with one or two exceptions, who however went at once on being spoken to by the traders and half-breeds near by. There were two copies of the treaty signed at the commissioners' table; *I holding the pen* for the Indians.

Question. After the treaty was signed did any of the chiefs speak in the council?

Answer. Three chiefs, to the best of my recollection, spoke after the treaty and Traders' Paper were signed, to wit: "Sleepy Eyes," the

"Orphan," and "Big Curly Head." The two first both mainly in reference to their having just paid their debts. Old "Sleepy Eyes" said they had now wiped out their debts; that he wanted the traders not to charge the Indians so much hereafter for blankets, shirts, guns, and provisions; that he thought ten dollars for blankets was high. The "Orphan" spoke also of having settled their debts, and used the words: "Father, we have now had pity on our traders and relations, and we want you to have pity on us. We are poor, and winter will soon be here, when we shall be very hungry, and we want you to try and send us some provisions early."

Question. Were the chiefs generally present?

Answer. They were pretty much all present.

Question. When was the distribution of the half-breed fund made?

Answer. That evening, soon after the treaty council was closed.

Question. Did you see any of the Indians sign the amendments to the treaty, and the power of attorney to Governor Ramsey, dated the 8th September, 1852.

Answer. On the afternoon of the 8th of September, 1852, when a chief of "Lac Traverse," with some of his soldiers, came in to sign the amendments and power of attorney, (the chief called "Burning Earth," the same as on the power of attorney.) Governor Ramsey asked the interpreter if it had been explained to him; and asked the chief if he understood what he was about to do. The chief said he understood it fully; and said further that the Indians had been a great deal troubled about the "*hand money*;" that they were glad it was now turned over to Governor Ramsey to do as he thought fit and just; that he wanted Governor Ramsey to go on to their great father soon, to get all the money and pay their "traders" and "half-breeds;" and that he wanted him particularly to take care of his friend and relative Xavier Frasier, who was sitting by.

Question. What do you know about young "Sleepy Eyes" being made a chief.

Answer. Late in the afternoon of the day of the signing of the treaty of Traverse des Sioux, old "Sleepy Eyes," accompanied by young "Sleepy Eyes" and the "braves" of the band, came to the commissioners "marque," and with a good deal of ceremony old "Sleepy Eyes" stated that he had grown old, and was not fit to discharge properly any longer the duties of chieftain; that he and his band desired that young "Sleepy Eyes" might be recognized as a chief in his stead; which request the commissioners, through Colonel Luke Lea, acceded to.

Question. Were you at the payment at Traverse des Sioux in the fall of 1852?

Answer. Having been appointed as physician to the *upper* Sioux Indians, I proceeded to Traverse des Sioux early in the month of November, 1852, and was there when Governor Ramsey and Major McLean arrived to make the payment.

Question. What was the state of feeling among the Indians at the time they arrived there?

Answer. On the afternoon of the day on which Governor Ramsey arrived, "Limping Devil," young "Sleepy Eyes," the "Little Rapids" chief, and I think Otaketa, with a number of their braves and headmen.

called at Governor Ramsey's office, to hold a "council." It appeared that it was mainly a visit of ceremony. Governor Ramsey told them to come next day and have their "annuity rolls" taken. They said they would come. That evening Governor Ramsey was called out by a messenger, and told that there was a *fracas* going on at young "Sleepy Eyes' " lodge, and that if he did not come and stop it, there would be bloodshed. He found a party of Indians going away; it being explained to the governor, that it was a party of "Red Iron's" soldiers', who had come there to punish him for having attended a council that afternoon. Governor Ramsey directed the interpreter to tell them that he would have no more such proceedings, and they said they would see him the next day.

Question. Was there a "soldiers' lodge" established there at that time?

Answer. There was, by "Red Iron."

Question. What was the effect of this "lodge" on the business of the payment generally?

Answer. To intimidate the other Indians from coming to be enrolled as they had promised, or from coming to see the governor, unless they were present. It had the effect to stop all business.

Question. Were you present at a "council" held between Governor Ramsey and Red Iron and his band?

Answer. I was, the next day, when "Red Iron" and his band of soldiers, "Big Gun," and "Limping Devil," called and had a council at the governor's room. "Red Iron's" manner was very violent, and his language insolent; that of his soldiers the same, and by the soldiers themselves addressing the governor in a violent manner; until at length Governor Ramsey said to "Red Iron," "You and your soldiers must behave in a respectful manner." "Red Iron" then said to the governor, "We want you to lay down all the money before us; it is ours, and you know very well that the President has told you to do so." Telling Governor Ramsey also, "You belong to the traders," and much other such language that I cannot now recollect.

Question. How often, to your knowledge, did Governor Ramsey send for Red Iron to come to council?

Answer. Three times.

Question. Did he come when sent for?

Answer. No; but the two last times he promised to come, but did not. But about two hours after the time he had set to come in, he was seen parading at the head of his band of soldiers, in full sight of all the village. When they found that he was not coming, he was sent for and brought in by the United States troops. I was present when he was brought in. Governor Ramsey asked him why he did not come when he had been so repeatedly sent for. "Red Iron" replied, that his soldiers had been stopped from coming with him, on a former day, by the United States troops, and that was the reason he had not come. (Governor Ramsey had directed that not more than three or four soldiers should come with a chief, on account of the disorderly conduct of Red Iron's soldiers before.)

Question. Did you ever hear the chiefs tell Governor Ramsey why they did not come to council when he sent for them?

Answer. I heard the chiefs—that is, two or three of them—tell Governor Ramsey that the reason they did not come was that they were afraid of Red Iron's soldiers. I heard one chief tell Governor Ramsey to send for his troops.

Question. Was "Red Iron" broken of his chieftainship?

Answer. He was; and Governor Ramsey said: "*As I made you a chief, at the time of the treaty, on the recommendation of your friends, I supposed that you would act like a chief, and restrain your people from bad and disorderly conduct; and as you have not so done, I will break you of your chieftainship; and you shall remain under arrest until your soldiers' lodge is disbanded.*"

Question. When and where was he released?

Answer. The next day. His soldiers, accompanied by all the chiefs on the prairie, came to the governor to beg him out, stating that the "soldiers' lodge" had been disbanded and broken up. Red Iron was brought out, and said: "I have been badly advised by white men, and promise to act better in future." He was then discharged. They then commenced taking the "rolls," and continued from day to day until they finished; and the day after they had finished the payment took place.

Question. Were you present during the payment when Governor Ramsey, Mr. Dousman, and Hugh Tyler came down stairs at Mr. Huggins's, when Captain Dodd was present; and did Hugh Tyler, in your presence, remark, "damn them, I think we will fetch them; we have concluded to commence paying to a few," &c.?

Answer. Those gentlemen had rooms up stairs in that house, and I have frequently seen them passing up and down stairs with others; and I remember seeing Captain Dodd there sometimes; but I have no recollection, when Captain Dodd and I were present, of Mr. Tyler making such remarks, or at any other time.

Question. Was the payment of the "annuities" made by Hugh Tyler at Traverse des Sioux?

Answer. The payment was made by agent McLean, assisted by Mr. Robertson, and Mr. Tyler, part of the time as a counter merely, and by others.

Question. Did you see any of the Indians sign the two hundred and fifty thousand dollar receipt at Traverse des Sioux?

Answer. I witnessed the signing of that receipt by one chief—Wahnok-soon-ta—of the Little Rapids band. It was in "open council." Governor Ramsey told the interpreter to be particular to make him understand what he was about doing. The contents of the paper were repeated to him, and he said he understood it, and wanted to sign it, which he did, with one or two of his headmen.

Question. Why was he the only chief who signed at that time?

Answer. Because he desired to go home, for the reason that his band were to be paid at the "Little Rapids."

Question. Were you present at Merrick's store, on the morning that Governor Ramsey left Traverse des Sioux, after the payment, when a paper was put into the governor's hands; and if so, state what occurred?

Answer. Governor Ramsey was on his way to St. Paul in a sleigh

with agent McLean. He had proceeded half the length of the village, and stopped at Merrick's store, where he was followed in by a number of Indians and whites, myself along with the rest. I stood by Governor Ramsey in the store, when a paper was put into his hand by an Indian, who commenced speaking to him, without there being any interpreter there. Governor Ramsey called out, "what do these Indians want?—is there anybody here who can interpret?" My impression is that a young "half-breed" came forward and interpreted. The Indian who spoke was a soldier, known as "the man with a horn," to the best of my recollection. He said nothing of the paper the governor held in his hand, but entirely in relation to *provisions*, and the distribution. The governor said that he could not now stop to talk with him, that he was on his way to St. Paul, and that their agent had left a man to attend to giving out *provisions* to them. This, to the best of my recollection, is all that occurred in the store. Governor Ramsey then got in his sleigh immediately, and drove off. No talk was held with him *after* he got in the sleigh.

Question. What chiefs at Traverse des Sioux were in favor of paying the money into their own hands; and what chiefs were opposed to it, and in favor of paying it as it was paid, if any?

Answer. There were never, at any time, more than three chiefs in favor of paying the money into their own hands, to wit: "Red Iron," "Big Gun," and, for a part of the time, "Limping Devil." The chiefs who were in favor of paying it, as it was paid, were: Wah-nok-soon-tah, young "Sleepy Eyes," O-ta-ke-ta, Wah-na-ta, and No-hope-ton. I believe that these were all the chiefs who were there at the time.

Question. Were you at the treaty at Mendota in August 1851?

Answer. Yes.

Question. Did you ever hear the chiefs in council with the traders make any acknowledgment of indebtedness?

Answer. I was often present when the subject of debts was spoken of, and heard the chiefs frequently acknowledge their indebtedness, and expressed their intention to pay.

Question. What sum, if any, did they acknowledge?

Answer. They admitted their indebtedness to over ninety thousand dollars.

Question. Do you know of any sum agreed upon between the traders and Indians in full satisfaction of their indebtedness?

Answer. I know of \$90,000 being agreed upon in full commutation of the traders' claims, and my impression is, that the half-breeds were to receive a part of it.

Question. How did the Indians expect to pay this \$90,000?

Answer. By the sale of their lands.

Question. Did you ever hear them say so?

Answer. Yes.

Question. Were you present when the treaty of Mendota was signed by the Indians?

Answer. Yes.

Question. Did the Indians say anything in the council where the treaty was signed in reference to the payment of their debts?

Answer. There was a good deal of conversation in relation to their debts and claims upon them.

Question. Was there anything said about provision being made for the payment of these debts?

Answer. There was. I do not remember the exact language.

Question. Did you, either at Mendota or Traverse des Sioux, know of any bribe, promise, inducement of any kind, or reward, being offered or given by Governor Ramsey, or by any one for him, to any chief or chiefs, of either band, or to any of their headmen, to sign receipts or vouchers, or of any other papers, or to permit him to pay the money to the traders?

Answer. I never did.

Question. Do you know of any acts of oppression, menace, or cruel conduct on the part of the governor, or any disguise or trick, by which the chiefs, or any of them, were induced to sign vouchers or receipts, or to give their consent to the payment of their debts to their traders?

Answer. I know of nothing of the kind; on the contrary, I often thought him too easy and lenient.

Question. Did you ever know any of the chiefs, either at Traverse des Sioux or Mendota, in or out of council, request Governor Ramsey to appoint arbitrators, or any person or persons to examine into the correctness of the traders' accounts?

Answer. I never heard anything of the kind.

Question. Did a majority of the chiefs at Traverse des Sioux, at any time, make a demand of Governor Ramsey for the money?

Answer. No.

Question. Were you generally present at the councils held at Traverse des Sioux?

Answer. I believe I was at all of them.

Question. What is the power of the "braves" and "soldiers" over their chiefs?

Answer. It is nearly despotic. Not one chief in a hundred can do anything, right or wrong, when they forbid it.

Question. Were these acknowledgements of indebtedness, and the agreement to pay \$90,000 to the traders and half-breeds by the Med-a-wa-kan-toan bands, made in the presence of the commissioners?

Answer. They were, as well as those at Traverse des Sioux.

Doctor THOMAS FOSTER, cross-examined by the government commissioners.

Question. Did the Med-a-wa-kan-toan chiefs sign a paper authorizing Governor Ramsey to pay the traders?

Answer. I do not know.

Question. Did you ever hear the chiefs in "open council," *after the treaty*, request Governor Ramsey, at Traverse des Sioux, or anywhere else, to pay the \$90,000 or the \$210,000 to the traders?

Answer. Nothing further than I have already stated.

Question. Did you hear Wah-na-ta, No-hope-ton, Wah-nok-soon-tah, young "Sleepy Eyes," and O-tak-e-tah, in "open council" request Governor Ramsey to pay the traders \$210,000?

Answer. I have heard some of them publicly, before Governor Ramsey, acknowledge their satisfaction with the "Traders' Paper," and say they desired it carried out. These declarations were made when other Indians were present, and other whites, (besides Governor Ramsey,) at Governor Ramsey's room, at Traverse des Sioux. These councils were generally held in the evening. The chiefs came at that time because they were afraid of "Red Iron's" soldiers. I heard each one say so, except Wah-nok-soon-tah and O-tak-e-ta.

Question. How do you come to call Wah-na-ta a chief?

Answer. By the fact that the other Indians say so; and from the fact that he had a band there; and the fact that his father was a chief, and signed Governor Doty's treaty as a See-see-toan chief.

Question. Was not Wah-na-ta a Yankton chief?

Answer. I believe he was born a Yankton, but intermarried with the See-see-toans of Lac Traverse, and, according to Indian custom, became a member of the band into which he married.

Question. How do you make No-hope-ton a chief?

Answer. Because he was generally recognized so at Traverse des Sioux. He had a small band there, and has a still larger band on the rolls at the agency.

Question. Was he recognized as a chief at the time of the treaty?

Answer. He was not there. A large portion of the Indians on the plains were kept back from the treaty by the weather and streams.

Question. Did Governor Ramsey make any chiefs at Traverse des Sioux?

Answer. He made Red Iron; that is all.

Question. Has not Red Iron a very large band, and was he not recognized by his band as a chief long before the treaty?

Answer. He was, as I understood, the head of the village at Traverse des Sioux, and was, to all intents and purposes, chief of that village, although only held to be a sub-chief of Old Sleepy Eyes, and part of his band, as that is the only way that new chiefs are known among the Indians, by separating from the rest into distinct villages or bands; and from being recognized by government officers, from time to time, as they present themselves as such.

Question. Do you know of any person being employed by the traders or others to assist in getting the Indians to acknowledge their debts, or to sign papers, or to ratify the amendments to the treaty?

Answer. I do not know, except by common report.

Question. Were you employed for such purposes?

Answer. I was not.

Question. Did you not receive, out of the traders' fund, a certain sum of money for services in their behalf, connected with this treaty?

Answer. I did not. I rendered no services to them.

Question. Were you paid, or were you to be paid, a sum of money out of the per centage paid by the traders, for any purpose connected with this treaty?

Answer. I never heard or knew anything about per centage until I saw it in the papers, nor did I get any of it.

Question. Did you receive, or have passed to your credit, the sum of

three hundred dollars from any one, as a gift or for services in connexion with this Sioux matter under the treaties of 1851?

Answer. I never received any money as a gift, to my knowledge, in this Sioux matter, nor did I ever receive anything for services rendered the traders, or for services rendered to anybody, except for the government or the Indians, in that Sioux matter. I explained what I did receive, and what I received it for. When I was at Traverse des Sioux, acting as secretary to the commissioners, there was a great deal of sickness among the Indians, arising from the wet and hot weather, from their number being crowded together, and from the ordinary effects of flour upon the Indians, who are unaccustomed to it. Under such circumstances, I being the only physician there, the Indians called upon the commissioners for help and assistance, and this extra work was imposed upon me, as a physician, of attending to it. I had as many as one hundred cases, and performed a great deal of arduous labor. I understood that I was to be paid by the commissioners for my services as a physician. When I presented my account to the commissioners they admitted it was correct, and that it ought to be paid, but said that they could not pay me, under the law, for two services at the same time; that I must look to the Indians for whom the services were rendered; that they would doubtless pay me when they got their money under the treaty. I accordingly left my bill with agent McLean for five hundred dollars. I spoke to various traders about it, and demanded that my claim, as it was *bona fide*, should come into the payment to the traders, as it was a debt incurred by the Indians prior to the treaty, and was not excluded by the term in the treaty of "present just engagements." I made no secret of this claim, but spoke publicly of it to Mr. Sibley, Mr. Sweetser, and others. The traders agreed that it was just, and that they would try and have it paid. When Hugh Tyler left Traverse des Sioux, after the payment, I intrusted this claim to him, as the attorney of the traders, and asked that he would see it paid as was promised; and on the 24th of December, 1852, Frederick Sibley paid to me the sum of three hundred dollars.

Question. Did not all these conversations about which you have spoken, in which the Indians, as you say, acknowledged themselves to be indebted to the traders in amounts exceeding the sums afterwards paid to them by Governor Ramsey, take place in conversations and councils between them and the traders before the treaties were signed by the Indians?

Answer. Except what the chiefs stated at the time that the treaty at Traverse des Sioux was signed, and afterwards, as I have stated, at the payment at Traverse des Sioux.

CITY OF NEW YORK, October 20, 1853.

The testimony of AUGUSTUS E. SILLIMAN, cashier of the Merchants' bank of New York, who was duly sworn by A. Post Campbell, esqr., a notary public, and afterwards examined by Richard M. Young, special commissioner, appointed by the President of the United States to investigate the charges preferred against the Hon. Alexander Ram-

sey, late governor and superintendent ex-officio of Indian affairs in Minnesota Territory, for alleged official misconduct in his disbursement of the funds appropriated for the fulfilment of certain treaty stipulations with the Sioux Indians, by the treaties of the 23d of July and 5th of August, 1851.

[AUGUSTUS E. SILLIMAN, a citizen of the city and State of New York, being first duly sworn, deposed as follows:]

Question. What is your age, occupation, and present place of residence?

Answer. Over twenty-one years of age, and cashier of the Merchants' bank of New York.

Question. Are you now the cashier of the Merchants' bank of New York, and were you acting in that capacity during the month of October, 1852?

Answer. As cashier or assistant cashier, and now cashier.

Question. Are you acquainted with the Hon. Alexander Ramsey, late governor and superintendent of Indian affairs, in Minnesota Territory, and had you any business transactions with him as cashier or assistant cashier of the Merchants' bank, in October, 1852, and subsequently?

Answer. Yes.

Question. Did he make any deposit or deposits of funds in the Merchants' bank, in October, 1852, and if so, to what amount and in what kind of funds were the said deposits made?

Answer. Yes; a deposit in gold coin, amounting to five hundred and eighty-three thousand and fifty dollars, (\$583,050.)

Question. Please state, if you know, or can ascertain by an examination of your bank books or memorandums, whether Governor Ramsey deposited or exchanged with the Merchants' bank of New York one or more drafts drawn in his favor by the Treasury Department in Washington city on the assistant treasurer of New York, as follows, to wit: treasury drafts, No. 3,808, for \$593,050; No. 3,810, for \$6,555 18; No. 3,811, for \$250; No. 3,812, for \$800—all dated about October 5, 1852, and making, in the aggregate, \$600,655 18, or thereabouts, and intended for disbursement chiefly to the Sioux Indians in the Minnesota Territory?

Answer. The total amount was as represented in the fourth question, and I have no doubt that it was in a draft on the assistant treasurer of New York.

Question. Did Governor Ramsey state in your presence, or hearing, for what purpose or purposes said funds were intended?

Answer. The funds were stated to be for Indian payments; and, I presume, by Governor Ramsey, or with his admission.

Question. Did he receive, in exchange for said drafts or treasury funds, bank notes or other paper currency; and if so, what amount did he take in bank notes? by what banks were said notes issued? what amount in gold or silver? and for what amount did he draw checks or drafts afterwards for the residue left by him on deposit? Please discriminate in your answer, so as to show precisely the relative proportion of each, as drawn or received by him, respectively.

Answer. I have reason to suppose that the amount of gold was one hundred thousand dollars, (see his draft No. —, October, 1852;) bank notes of this bank, sixty thousand dollars, (see draft No. 6, October 12, 1852;) and the balance of the deposit has been paid on various drafts, to sundry parties, down to a balance of sixty-one dollars and seventy-five cents, which still remain subject to his order. Some of the other drafts may have been paid in gold, but I am not aware of it. I think the whole amount of bank notes carried by him was one hundred thousand dollars, forty thousand of which was received from other banks.

Question. Do you know, or believe, from the circumstances attending said transactions with your bank, whether Governor Ramsey received, or was to receive, any pecuniary compensation, benefit, or advantage, in any way, directly or indirectly, in consequence of his having made said deposit and exchanges; and if so, in what way was he to be compensated or benefited?

Answer. He never, directly or indirectly, received one cent's advantage in such way from this institution; of course, I have no knowledge of what he received from other persons.

Question. Was not the deposit and exchanges, as made by him, of considerable pecuniary advantage to your bank, for which it could well have afforded to have paid a compensation to the person making them?

Answer. Yes, like any other deposit.

Question. How long was it, averaging as near as you can, after said deposit was made by Governor Ramsey, in October, 1852, before the checks or drafts drawn by him, in the Minnesota Territory, upon the residue of said funds, were presented for payment at the bank, in New York?

Answer. I furnish his account with the bank as the answer to this question, (marked A,) which is as follows:

1852. Oct. 11	1852. Oct. 11	By cash.....	\$583,050 00
12	To cash.....	\$150,000 00	
	...do.....	4,000 00	
	...do.....	100,000 00	
	...do.....	15,000 00	
	...do.....	10,000 00	
	...do.....	6,000 00	
	...do.....	5,000 00	
	...do.....	60,000 00	
	To balance transferred.....	233,050 00	
		583,050 00	

Dr. *A. Ramsey in account with the Merchants' Bank, New York.* Cr.

1852. Nov. 12 Dec. 8	1853. Oct. 13	By balance transferred.....	\$233,050 00
11	To cash.....	\$90,000 00	
	...do.....	2,500 00	
	...do.....	5,000 00	
	...do.....	9,000 00	
	...do.....	13,000 00	
	...do.....	6,000 00	
	...do.....	1,500 00	
	...do.....	1,000 00	
	...do.....	1,000 00	
	...do.....	1,000 00	
	...do.....	1,000 00	
	...do.....	1,500 00	
	...do.....	1,000 00	
	...do.....	1,000 00	
	Carried forward.....	233,050 00	

A. Ramsey in Account—Continued.

Dr.		A. Ramsey in Account—Continued.		Cr.	
1853.			1853.		233,050 00
Feb.	2	Brought forward.....		Brought forward.....	
	4	By cash.....	\$217,960 25		
		.....	190 00		
		.....	500 00		
		.....	241 50		
	5	.....	166 50		
	25	.....	50 00		
	26	.....	200 00		
	2	.....	150 00		
March		Balance.....	61 75		
				Oct. 20	By balance. E. E.....
					233,050 00
					61 75

Question. Is it not considered of great pecuniary advantage by the banks in New York to have large amounts of their bills or notes taken to remote parts of the country for use and circulation, where several weeks or months must necessarily intervene, in the ordinary course of business, before they would be returned back upon the banks for payment?

Answer. Yes.

Question. Was a person by the name of Hugh Tyler in company with Governor Ramsey, when the said deposits and exchanges were made by him with your bank, and if so, what part, if any, did he take in said transactions?

Answer. I cannot distinctly recollect, but I have a vague recollection of an introduction to a person of that name, but cannot say whether it was in this transaction or not.

Question. Did Hugh Tyler, about that time or afterwards, have any money transactions with your bank, either for Governor Ramsey or himself, directly or indirectly—and if so, in what way, and under what circumstances?

Answer. A large number of the drafts drawn by Governor Ramsey are in favor of Hugh Tyler.

Question. Did Governor Ramsey, as far as you know, or have heard, make any deposits or exchanges of any portions of said funds with any other bank or banks except yours, about the time mentioned, (in October, 1852,) in New York or elsewhere; and if so, please state all you know on that subject?

Answer. I have reason to suppose that a deposit of one hundred and fifty thousand dollars was made in the Bank of Commerce, New York. (See draft No. 1, October 11, 1853.)

Question. Did Governor Ramsey, or any person for him, borrow or receive accommodation in any way from the Merchants' bank of New York, or from any person or persons having official connexion with said bank, for any sum or sums of money, either in consequence of said deposit and exchanges, or separately and independently of said transactions, during the month of October, 1852, or subsequently—and if so, in what way, for what amounts, and upon what terms and conditions; and have said sum or sums been repaid by him, or by any person for him?

Answer. Never to my knowledge, at that or any other time.

A. E. SILLIMAN, *Cashier.*

Subscribed and sworn to before me, this 20th day of October, in the year 1853.

A. POST CAMPBELL,
Notary public, State and city of New York.

CITY OF WASHINGTON,
November 26, 1853.

The testimony of the Honorable Luke Lea, late Commissioner of Indian Affairs, who was duly sworn by John L. Smith, esq., and ex-

amined by Richard M. Young, special commissioner, appointed by President of the United States to investigate the charges preferred against the Honorable Alexander Ramsey, late governor and superintendent of Indian affairs in the Minnesota Territory, for alleged official misconduct in his disbursement of the funds appropriated for the fulfillment of certain treaty stipulations with the Sioux Indians, by treaties of the 23d of July and 5th of August, 1851, taken at the office of Richard M. Young, in Washington city, on the 1st day of December, 1853, at the request of Governor Ramsey, who was present at the examination.

Questions by Governor Ramsey.

Question. Were you present, as one of the commissioners, at the negotiation of the treaties at Traverse des Sioux and Mendota with the Sioux Indians, in the summer of 1851?

Answer. I was.

Question. State what were the circumstances under which the provisions of the first clause of the fourth article were inserted?

Answer. To state all the circumstances under which the provisions referred to were inserted in the treaties would be impossible. I can only state in general terms the leading considerations that influenced the commissioners to agree to the stipulations in question. The traders among the Indians, (all of whom were represented to be present in person or by proxy,) claimed to have large demands against the government amounting in the aggregate, if I remember rightly, to near half a million of dollars. These traders exercised a controlling influence over the Indians, and it was quite evident that no treaty could be made without their concurrence and active co-operation. The Indians generally seemed to acquiesce in the justness of the claims preferred by their creditors, and to be anxious that provision should be made for their payment. As the negotiations must have entirely failed had we refused to provide for them, we yielded to the necessity of the case (adopting the phraseology formerly used for a like purpose with the sanction of the Senate) assented to the clauses of the treaties mentioned in the interrogatory.

Question. Did the chiefs and Indians generally desire and request the provision made for the payment of their debts?

Answer. The answer to the second interrogatory is an answer to this; but it may be proper to add that the Indians would have been willing to make more liberal and specific provision for their traders if they could have got our consent to it.

Question. Do you recollect any conversation between yourself and Governor Ramsey in relation to the payment of the debts of the Indians, when the money was placed in his charge in October, 1852, or if so, what was it?

Answer. About the time the Sioux money was placed in Governor Ramsey's hands, to wit, in October, 1852, a conversation took place between him and myself, the full particulars of which I do not distinctly remember; but I recollect that allusion was made to the arrangements entered into between the Indians and their traders at

verse des Sioux ; that Governor Ramsey expressed himself as apprehensive that the Indians, in consequence of being tampered with, would be disposed to repudiate their just engagements, and have the money squandered or misapplied in such way as to defraud their honest creditors, and debauch themselves ; that my reply was, in substance, they ought not to be permitted to do so, and that, if necessary to prevent such injustice and mischief, they should be required to abide by the agreement between them and their traders, provided it was fairly and understandingly made.

Cross examination.

Questions by R. M. Young, government commissioner. From your acquaintance with Indian character, do you think them qualified to calculate or estimate large amounts, either in money matters or in regard to accounts for goods sold them by their traders ?

Answer. Generally they are not, and yet I do not think they are apt to be greatly deceived as to the amount of their indebtedness either individually or collectively. They certainly have very imperfect ideas of the value and proper uses of either money or land, and yet the government assumes that they have so far a competent knowledge of both as to make them the subject matter of the most solemn contracts.

Question. Are they not governed entirely, in making admissions as to their indebtedness, by the statements and representations made to them by their traders ?

Answer. They are not ; for it often happens that serious disputes arise between them and their traders as to the amount of their liabilities. While subject to be cheated, they are prone to cheat, and so are more apt to deny an honest claim than to admit a false one.

Question. Did the chiefs at any time suggest to you, or did they request you, to appoint disinterested and competent persons to examine the correctness of the accounts of the traders ? Was anything said or suggested on that subject ?

Answer. I do not recollect that any such suggestion or request was made. We were repeatedly asked to make special provision for the benefit of particular individuals, but we took pains to inform the Indians and traders that all we could do was to provide a general fund for the payment of debts, and that the distribution of it was a matter for them to arrange among themselves.

Question. Do you know Hugh Tyler, and the character of the services rendered by him for the traders ? If so, please state it.

Answer. I have known Mr. Tyler for several years. As to the services rendered by him for the traders I know nothing, except that he exerted himself with much zeal and no little efficiency, I think, in endeavoring to secure the ratification of the treaties by the Senate.

Question. In speaking of any understanding or agreement between the traders and the Indians, as to any acknowledgement of indebtedness, or any promises to pay their debts to the traders, will you please say what chiefs were present on each occasion spoken of, how much was acknowledged to be due to the traders, and whether such admissions

and agreements were made in "open council" when all or most of the chiefs were present?

Answer. I do not now recollect the names of but very few of the chiefs who signed the treaties of Traverse des Sioux and Mendota, nor can I designate the times and places particularly at which, or the individuals by whom, the indebtedness of the Indians was mentioned and acknowledged. It was a matter so generally understood and talked about, that anything said by one individual or another was not particularly noted, and consequently made no permanently distinct impressions. I cannot say that any chief or Indian ever stated specifically the precise amount he considered to be due to the traders; but from what took place in "open council," and otherwise, it was manifestly the desire of the Indians to provide as large a debt fund as they could possibly obtain.

Question. Do you know of any agreement or understanding between Governor Ramsey and the traders, to the effect that the money provided to be paid by the fourth articles of said treaties was to be paid *directly* to the traders, and *not* to the Indians, and, if so, what was that understanding?

Answer. I have no knowledge of any such agreement or understanding.

L. LEA.

Subscribed and sworn to before me, this first day of December, 1853.

JOHN L. SMITH.

Justice of the Peace.

Schedule of papers sent to the President of the United States, April 6, 1853, as referred to in a resolution of the Senate of the 5th April, in relation to charges against Alexander Ramsey.

Charges by Mr. Sweetser, with letter and two memoranda.

Charges by Daniel A. Robertson.

Copy of resolution of the Senate, January 10, 1853.

Copy of resolution of the Senate, January 17, 1853.

Printed copy of the report of the Secretary of the Interior, dated January 27, 1853.

Printed copy of the report of the Secretary of the Interior, dated February 15, 1853.

Report of the Secretary of the Interior, dated March 21, 1853.

Copy of letter of Alexander Ramsey, dated February 2, 1853.

Copy of letter of Alexander Ramsey, dated February 12, 1853.

Copy of communication of Alexander Ramsey, and papers therewith attached, (84 pages,) dated March 2, 1853.

Copy of letter of M. Sweetzer, (and accompanying affidavit,) dated March 18, 1853.

Five numbers of the "Minnesota Democrat," containing articles in relation to Ramsey.

Record of the proceedings of the committee of the Senate.

WASHINGTON, *February* 26, 1853.

SIR: In answer to your letter of this date, I have the honor herewith to submit the following specifications connected with the conduct of Superintendent Alexander Ramsey and others in the late Sioux disbursement:

1. Alexander Ramsey stands charged with delinquency, as a public officer, in the disbursement of money due the Sioux Indians of Minnesota, in manner following:—with confederating with H. H. Sibley, H. L. Dousman, Hugh Tyler, H. Steel, and others, to absorb the whole fund named to favorites, to the exclusion of meritorious creditors, and in violation of law and the universal practice of the government in the liquidation of the indebtedness of Indians to their creditors.

2. Alexander Ramsey stands charged with having received, from the government of the United States, some five hundred and ninety-three thousand dollars, in the national currency of the government, under the instructions from the proper department to pay to the Dakota Sioux, in accordance with their treaty stipulations. And, of having exchanged the national currency, thus obtained, before leaving the eastern cities, for bank paper and drafts; of having paid the bank paper and drafts upon government contracts; and with returning the receipts therefor to the department for settlement of his accounts.

3. Alexander Ramsey stands charged with having violated the treaties with the Dakota Indians in refusing payment to them, although

often and urgently demanded, in accordance with their treaty stipulations ; with having unlawfully paid said money into the hands of one Hugh Tyler, who divided it among a few claimants at the house or trading post of H. H. Sibley, the wishes and rights of the Indians having been totally disregarded, in violation of law and the express stipulations of their treaties.

4. Alexander Ramsey stands charged, in connection with H. M. Rice and others, with having assembled the Upper Siouxs at Traverse des Siouxs, and there attempted to procure from the Indians written authority to control their money arising under their treaties.

5. Governor Ramsey stands charged with having attempted to obtain, from the treasury of the United States, the money due the Sioux Indians, upon a power of attorney, which he admitted to be void, and which he obtained from the Indians by fraud.

6. Said Ramsey stands charged with cruel and oppressive conduct towards the chiefs, who were the authorized agents of said bands, and the substitution of unauthorized persons as chiefs and braves, and the procurement of receipts from such persons, which he is now attempting to palm off upon the government as vouchers in the settlement of his accounts with the Indian Bureau.

7. Said Ramsey stands charged with improper conduct in not holding his councils with the Medawahkantoan Indians at the council house of the government, and with holding the same at the trading (post) house of persons with whom he was confederating, to overreach them by means of menace, and other influences which enabled him to effect his purposes aforesaid ; that the said chiefs were kept drunk by the use of intoxicating liquors during said councils.

8. Said Ramsey stands charged with having openly violated the treaty in not reserving a sufficient amount out of the Seeseetoan and Wahpaytoan to remove and subsist them for one year.

9. Said Ramsey stands charged with having paid nearly the entire trust fund of said Indians, amounting to near four hundred and fifty thousand dollars, at the trading house of H. H. Sibley, and but few, if any, were benefitted by said payment but those who now are, or have been, connected with said company in trade, and with whom he was confederating ; that there are many other meritorious creditors of the Indians who were thrust aside, and were not permitted to share in the distribution.

Any aid that may be desired in proof of the specifications aforesaid, I am willing to give, believing that full and conclusive proof can be obtained to sustain the same in every particular.

M. SWEETSER,
Attorney for the Indians.

HON. WM. K. SEBASTIAN,
Chairman Committee Indian Affairs, Senate U. S.

WASHINGTON, *March* 15, 1853.

SIR: With a view to a full and impartial investigation of the conduct of Governor A. Ramsey, in the late Sioux payment, I desire to state: that from the interested position of the witnesses for the defence, and the absence of witnesses who are conversant with the facts connected with the payment, that this investigation be continued and adjourned to Minnesota.

Public interest demands, and the rights of the Indians require, that they (the Indians) should be heard; in Minnesota the facts are known. With a full development of the testimony, I state the charges will be fully and clearly established, both as to the refusal of Governor Ramsay to comply with the treaty, and the request of the Indians, in the payment of the money, and the connection of the parties implicated in the fraud.

Messrs. Tyler, Dousman, Sibley, Bourrup, Steel, and many others, who are attempted to be used as witnesses, will be shown to be as deeply interested in the transaction as Ramsey himself; they, it will be shown, were parties to and acted in connection with the governor.

The statement of Dr. Bourrup, in relation to a bargain between myself, two others, and Dousman, for the sum of thirty thousand dollars, is not material to the issue; neither proves that Governor Ramsey did or did not act corruptly in the disbursement of the Sioux money; but is, so far as I am concerned, a fabrication, and without foundation. In fact, these statements more clearly show, to my mind, the absolute necessity of a full and thorough investigation, that parties implicated may have an opportunity to purge themselves, if innocent, and that the Indians may be protected in their rights, if wrong has been done them.

I state as a fact, from information received, that since I left the Territory, the Upper Sioux have, in full and open council, in presence of the agent, declared that they had not received payment for their country, and would not leave it until payment was made or guarantied by the government, in accordance with their treaty.

The peace of the frontier, and the security of the lives and property of the frontier settlements, require this investigation to be a thorough one. This only can be done by the committee adjourning to Minnesota, or selecting some other point, and there summon persons to attend; also to call for papers. Minnesota, however, is the point most desirable for the investigation.

I am, dear sir, your obedient servant,

M. SWEETZER.

Hon. W. K. SEBASTIAN,

Chairman Committee Indian Affairs, Senate U. S.

Memorandum.

It will be seen out of five hundred and ninety-three thousand dollars paid by the government to Alexander Ramsey, *ex officio* superintendent, &c., not to exceed eighty or one hundred thousand dollars was taken to the Territory in gold or silver, the balance was exchanged in New York and Pennsylvania for paper money and drafts;

That in Minnesota he paid government contractors in paper money and drafts. That he paid large sums of paper money to half-breed Indians ;

That he refused to pay to the chiefs of the Dakotah Indians, as required by the fourth article of their treaties of July and August, 1851 ;

That near a third of a million of dollars was paid by him to H. Sibley, H. L. Dousman, Dr. Borup, Franklin Steel, Joseph R. Brown and others, upon a fraudulent contract obtained from these Indians at the time the treaty was signed ; that Hugh Tyler was made, as is understood, the media of this payment, for which fifteen per cent. was charged both to half-breeds and traders ;

That the money was paid in violation of the treaty, in violation of the act of Congress appropriating the same, and against the often repeated wish of the Indians, and against their solemn protests ;

That the Indians repeatedly, in open council, demanded their money under treaties, but was refused payment by the governor ;

That his vouchers now on file in the Indian Department for the settlement of his accounts are frauds upon the Indians, the receipts of Seeseetoan Wahpaytoan chiefs, as presented by him, are not the receipts of their principal chiefs, but, with two exceptions, are signatures of young men not recognized by the nation, and possessing no authority from them to act ;

That the receipt of the Wahpaytoan chiefs is equally a fraud, obtained from them illegally, and against their wishes ;

That, in all his official intercourse with the tribes for the past year, he has manifested a predetermined and fixed purpose to avoid the payment of this large sum to the Indians. The council held at Traverse des Sioux in July last establishes this fact beyond doubt ;

That the disbursement of this large sum is not a payment to the Indians, their wishes having been totally disregarded, and the law of the treaty in no particular complied with.

For proof, refer to Wallace B. White, Nathaniel McLean, James Campbell, Duncan Campbell, C. E. Shafer, A. G. Huggins, Dodge, David Olmstead, D. A. Robertson, Hollingshead, R. McKinzie, St. Louis, Alexander McKinstry, Marshall, Prescott, Sioux interpreter H. M. Rice, Tullis, and the half-breeds and others whose affidavits are now on file in the Indian Department. Some of the witnesses named are in the city, a majority in Minnesota.

I have to request that Kenneth McKinzie, of St. Louis, be summoned to appear before your committee ; this notice should be given at an early day, designating time and place.

Also that President B. Lamar, of the Bank of the Republic in New York, be examined by your committee in relation to the propositions of Ramsey in the sale of the gold, and also as to who did make the chase, and at what per cent.

M. SWEETSER.

Hon. W. K. SEBASTIAN.

B. LAMAR, President Bank of the Republic, New York—

Governor Ramsey called on him in October, 1852 and wanted to exchange off \$600,000 in *gold for currency*.

I am informed this man can tell on what terms Ramsey wanted to exchange, and what bank did arrange with Ramsey.

I am informed by Goodrich that H. Tyler deposited in a bank in Oswego, New York, thirty thousand dollars, on his return from Minnesota.

Against Alexander Ramsey, Governor of Minnesota Territory, and ex-officio superintendent of Indian affairs, and others, I have made the following charges, to support which, I am prepared to cite a number of witnesses of the most respectable character :

1. That said Alexander Ramsey exchanged a large portion of the gold received by him to pay the Dakota Indians, as stipulated under the late treaty, for bank notes, in violation of the law ;

2. That he deposited a large portion of said gold in banks, in violation of law ;

3. That he paid contractors for supplies for said Dakota Indians, in bank notes, in violation of law ;

4. That he refused to pay said Dakota Indians the amount due them under the treaties aforesaid, but by force and intimidation attempted to compel them to consent to such a disposition of said money as he desired ; and by his conduct in this regard, treated them with injustice and cruelty, and in violation of law, treaty stipulations, and his own solemn pledges previously made to said Indians ;

5. That he, said Ramsey, with H. H. Sibley, Dr. C. W. Borup, Joseph R. Brown, Charles D. Fillmore, and others, have co-operated to deprive the Dakota Indians of their rights under the late treaties, and that by their machinations, the money due said Indians was disbursed in violation of law, the rights of the Indians, and treaty stipulations ;

6. That one Hugh Tyler was employed by the parties, to this violation of law and treaty stipulations, as the visible go-between, borer, or agent, and that a large per centage was agreed to be paid, or left in his hands, as a fee from the fraudulent recipients of the Dakota money ;

7. That in consummation of the frauds above alleged, Alexander Ramsey paid a large amount of moneys due the Dakota Indians by treaty, and by him received to pay them, to the said Hugh Tyler, who paid it chiefly to traders connected with the Fur Company of Pierre Chouteau and others, which proceeding was in violation of law and treaty stipulations.

DANIEL A. ROBERTSON,

Sworn to and subscribed March 19, 1853.

W. F. WALLACE,

Clerk to Committee.

IN THE SENATE OF THE UNITED STATES,
January 10, 1853.

On motion by Mr. Gwin,

Resolved, That the Committee on Indian Affairs be instructed to inquire into the allegations of fraud contained in certain of the public prints, with regard to the disbursement by Alexander Ramsey, superintendent of Indian affairs, of the money appropriated to carry out the stipulations of the treaties concluded with the Sioux or Dakota Indians in the year eighteen hundred and fifty-one.

Attest :

ASBURY DICKINS, *Secretary*

IN THE SENATE OF THE UNITED STATES,
January 17, 1853.

On motion by Mr. Sebastian,

Resolved, That the Committee on Indian Affairs be authorized to send for papers, and to call persons before them, to be examined under oath touching the matters contained in the resolution of the Senate, of the 10th of January, referred to said committee.

Attest :

ASBURY DICKINS, *Secretary*

DEPARTMENT OF THE INTERIOR,
Washington, March 21, 1853.

SIR: On the 27th of January and 15th ultimo, my predecessor transmitted to the Senate copies of all the papers then on file in the department, touching "the allegations of fraud contained in certain of the public prints, with regard to the disbursements by Alexander Ramsey, superintendent of Indian affairs, of the money appropriated to carry out the stipulations of the treaties concluded with the Sioux or Dakota Indians, in the year 1851," which the Committee on Indian Affairs, in the Senate, were directed, by resolution of the 10th of January last, to inquire into.

I have just received a communication from the Commissioner of Indian Affairs, dated the 19th instant, accompanied by other papers in the case which have been received subsequently, and have the honor to communicate them to the Senate herewith.

I am, sir, with much respect, your obedient servant,
R. McCLELLAND, *Secretary*

Hon. D. R. ATCHISON,
President of the Senate.

DEPARTMENT OF THE INTERIOR,
Office of Indian Affairs, March 19, 1853.

SIR: I have the honor to enclose herewith copies of three communications, recently received at this office from Alexander Ramsey, Governor of Minnesota, and *ex-officio* superintendent of Indian affairs, together with a copy of a letter from Madison Sweetzer, and of the affidavits therein referred to; all having relation to the disbursement by said Ramsey of the money appropriated to carry into effect stipulations of the treaties concluded with the Sioux Indians, in the year 1851.

Copies of all the other papers on file in this office, touching this subject, having heretofore been transmitted to the Senate Committee on Indian Affairs, I respectfully recommend that the copies herewith be disposed of in like manner.

Very respectfully, your obedient servant,

L. LEA, *Commissioner.*

ROBERT McCLELLAND,
Secretary of the Interior.

MINNESOTA SUPERINTENDENCY,
St. Paul, February 2, 1853.

SIR: I enclose herewith a paper sent me by the Rev. Mr. Riggs. It is the assent of the chief, generally known as "Big Curley," to the payment of the traders' claims. This chief did not reach Traverse des Sioux at the time of the late payment, and evidently means by this paper to give his assent to the voucher, signed by the other chiefs, and transmitted by me, with my accounts for the fourth quarter of 1852—which please see.

All who are chiefs, and had rights under the treaty of Traverse des Sioux, with one exception, have thus given their renewed assent to the payment of the traders' claims. You will also see that the Rev. Mr. Riggs, who witnessed the distribution of indebtedness, by the Indians, among their traders—a most excellent interpreter, and a man of most unexceptionable character, witnesses this paper—a most significant fact.

Very respectfully, &c.,

ALEXANDER RAMSEY.

Hon. L. LEA,
Commissioner, &c., Washington, D. C.

To the Honorable Alexander Ramsey, Governor of Minnesota, and Mr. Nathaniel McLean, Indian Agent.

We the chiefs and braves of the Wahpetoway Dakotas, at Lac qui Parle, do of our own accord hereby signify our assent and consent to that part of the treaty of 1851, which gives a portion to the traders and half-breeds, and we desire that it may be carried into effect as speedily as possible; in testimony of which we hereto affix our names and marks.

UPIYAHDEYA,	his x mark.
WIYWHA-NONPAKINYA,	his x mark.
WAKAANNANI,	his x mark.
MAY-PIY-NAS-KAUS-KA,	his x mark.
AIY-AH-PUYA,	his x mark.
MAZA-DU-TA,	
MAKAIDENYA.	

Witnesses :

S. R. RIGGS,
LOUIS LAWRENCE.

LAC QUI PARLE, *January 13, 1853.*

MINNESOTA SUPERINTENDENCY,
St. Paul, February 12, 1855

SIR: I have the honor to acknowledge this day, the receipt of communication of the 22nd ult., enclosing one of the Secretary of Interior of the 11th ult., along with copies of depositions by G. and Joseph Le Blanc, Alexander McLeod, Peter Ruyer, Lewis A. and Vetal Boger, and a memorial of certain Sioux chiefs addressed to the President of the United States.

I have this winter, within the last two months, several times addressed you in relation to this business; and on the 14th ultimo the honor to transmit you my accounts for the 4th quarter of 1854, well as a report of my action in the late payments, enclosing you authentic copies of all the papers upon which those payments were indicated.

Had these communications been received before the transmission of your letter, I doubt not they would have been considered a satisfactory answer to the several allegations and insinuations contained in the papers just received.

Still, I am gratified by the opportunity which thus again offers to present more in detail a history of the transactions alluded to, which I shall forward in a week or two, as I desire nothing so much as investigation and examination the most searching, into all these matters, in which I am conscious of having performed only my duty, with conscientiousness and a sincere intention to benefit the Indians, to do justice both to them and their traders, and discharge in the best possible manner all the obligations of government expressed or implied.

The persons who are stimulating these slanders seem restrained of no sense or propriety, nor obligations, moral or religious; for to receive in the affidavits forwarded, they have gone so far as to delude ignorant men into unconscious perjury, to sustain them in their vengeful charges.

No man, however upright and conscientious, can hope to escape the shafts of such recklessness, of malignity, which, not content with moral debasement, would in this manner drag down innocent ignorance to their own level of crime.

To such people, who have neither reputable character to lose, nor reasonable hope of ever acquiring one, I have nothing to explain or answer to make; but I do feel desirous that the government, which I have spared no pains faithfully to serve, should not be deluded by them; and that my fellow-citizens should do me the justice to believe me incapable of the acts alleged, contrary as they are to the tenor of my official and private life.

Very respectfully, your obedient servant,

ALEX. RAMSAY

Hon. L. LEA,
Commissioner, &c.

WASHINGTON, March 18, 1855

SIR: Enclosed please find affidavit in relation to certain rec

now on file in your office purporting to be from the principal chiefs of the See-see-toan, Wah-pay-toan and Me-de-wah-kan-toan bands of Dakota Indians.

The receipts referred to are to be found among the vouchers returned to your office by Superintendent Ramsey, for the settlement of his accounts. I have to request, as the attorney of the Indians, this affidavit be placed on file, and accompany said vouchers.

Until it shall be shown that the money due the Sioux Indians has been paid in accordance with law, and the treaties with said Indians, that these accounts will not pass your office for settlement.

An acknowledgment of the receipt of the affidavit and its being placed on file is respectfully requested.

Your obedient servant,

M. SWEETZER.

Hon. L. LEA,

Commissioner of Indian Affairs.

Personally appeared before me the undersigned J. W. Beck, a justice of the peace, Madison Sweetser, who upon his oath doth depose and say: That a receipt now on file in the Indian Department, for two hundred and fifty thousand dollars, purporting to be from the chiefs of the See-see-toan and Wah-pay-ton bands of Dakota Indians to George Alexander Ramsey, ex-officio superintendent of Indian affairs of Minnesota, is not from a majority of the principal chiefs of said bands, who were authorized under the treaty to receive and receipt for said money; that not to exceed one or two of said principal chiefs appear to have signed said receipt; that there are seven principal chiefs of said bands; that the receipt was not obtained in open council with the consent of the parties authorized to execute it; the signatures of the young men whose names are thereunto attached was obtained against the repeated remonstrances of the principal chiefs; and that the payment of the money to the traders, and not to the chiefs, as per fourth article of the treaty with said Indians of July 1851, was in violation of law. That the receipt of the Me-de-wah-kan-toan chiefs for seventy thousand dollars was obtained from them by improper influences, and was only given to obtain their annuities, to prevent starvation of their people, and other causes equally oppressive. The payment of the money for which this receipt was given to certain traders, against the often repeated wish of the Indians, was in open violation of their treaty stipulations.

And further this deponent saith not.

M. SWEETZER.

Subscribed and sworn to before me, this 17th day of March, 1853.

J. W. BECK, J. P.

MINNESOTA SUPERINTENDENCY,
St. Paul, March 2, 1853.

SIR: The reception of certain papers concerning the recent disbursements under the Sioux treaties were acknowledged by me on the 12th ultimo, at which time I also expressed my intention of presenting to the department at an early period such further "explanation" on the subject as would, along with my report of January 14, 1853, form a full and complete history of all these matters.

To the two newspapers of the 15th and 22d of December last, printed at St. Paul, entitled the Democrat, containing editorial articles reflecting upon me, I do not feel myself called upon specially to reply.

To be compelled to answer the various charges recklessly made by newspapers would consume nearly the whole time of every prominent public officer in the Union, and leave him little opportunity to discharge his public duties, so that from sheer necessity he is forced to endure and disregard them, even when they appear in papers of respectability.

But in this case the paper making the allegations is of no sort of standing with the community, nor influence with the political party it claims to belong to, and its editor is chiefly notorious for his systematic contempt for truth and proficiency in the vocabulary of low abuse.

Self-respect, therefore, along with other considerations, forbid my noticing these scurrilous productions, which have, however, received from another press in St. Paul such answer as its editor thought they required.

Two numbers of this paper, entitled "The Minnesotian," I herewith forward for the information of the department, as in like manner I forwarded some time since, with the same view, the numbers of the newspaper that made the complaints. I did this because I would at all times meet inquiry half way, desiring nothing so much as a fair investigation into every transaction of my official career in this Territory.

The copies of the affidavits of six persons transmitted to me from the department, under the same date of January 22, I have examined with care, and deduce from them the conclusion that disappointed speculators and low-minded politicians are prepared for almost any extreme of villany, when they can resort, as they have in this instance, to *subornation of perjury*, to achieve on the one hand a miserable revenge for my having frustrated, in the course of my duty, their nefarious speculations, and at the same time on the other afford them aid in the ulterior purposes they doubtless have in view.

The unfortunate position into which they have unscrupulously inveigled the poor, and, with one exception, ignorant men whose names are attached to the affidavits forwarded to me, is shown by the *counter affidavits of the same men*, hereto attached, marked severally AA, BB, CC, DD.

It seems that advantage was taken of their ignorance, or their being in a state of excitement or of intoxication, to make them perjure themselves. A heartless imposture, characteristic of the desperate speculators, who endeavored to destroy the feeble moral integrity of the Indians to get them to repudiate their just obligations and honest debts. But I forbear further comment. The counter affidavits speak for themselves, and will be deemed a satisfactory offset and answer to those

concocted for these deluded men by Messrs. *Sweetzer & Robertson* in December last.

Though six in number, the spurious affidavits then got up are merely two sets; those purporting to be sworn to by Louis Angér, Vetal Boyer, and Peter Bouillard, (miss-spelled Ague, Borya, and Builer,) are all the same, with slight variation, while those which Joseph and George Le Blanc, (mis-spelled Le Blan,) and Alex. R. McLeod, depose to, are also substantially alike. The allegations of the one set are met by the new depositions of Angér, Borya, and Bouillard; and the falsehoods of the other set are negatived by the affidavit of Mr. McLeod. George and Joseph Le Blanc live above Traverse des Sioux, and there has been no opportunity to read to them the affidavit purporting to be theirs. Like the others, they are, no doubt, perfectly unconscious of ever having sworn to such a paper—a conclusion which the supplement of the new deposition of Louis Angér rather tends to confirm. The part Mr. Sweetzer took in getting up the original batch of falsehoods, backed by the unconscious perjury of his victims, may also be inferred from the same supplement to Louis Angér's testimony. Though not in his deposition, it is learned from Mr. McLeod and others, that *Robertson*, editor of the Democrat, took charge of his affidavit; and I doubt not, from this and other circumstances, participated with Sweetzer both in this *criminal conspiracy to suborn men by fraud to perjure themselves* and in his other conspiracy to cheat the Indians and their traders out of their debt funds.

Beside these affidavits, the Hon. Wm. H. Forbes, a merchant of this place, member of the first and each succeeding legislative council, and last year president of that honorable body, has volunteered an affidavit on the subject, which is also subjoined, (marked E.E.) Mr. Forbes being connected by marriage with the Sioux and a proficient in their language, has obliged me by acting as interpreter for this superintendency ever since my arrival in the Territory, and is, therefore, well acquainted with nearly every step of my official intercourse with those Indians.

With the transmission of the several papers above referred to, I might at this point safely rest the case, without further "explanation," having fully exhibited the falsehood and perjury embodied in the only tangible evidence that has been adduced to sustain the complaints laid before the department.

But, as I said before, it is the reverse of my desire to evade investigation of any branch of this subject. To all honest inquiries, I am willing to afford explanation of every phase, even of my action in the recent Sioux disbursements, being conscious that everything has been done in a correct and upright manner; that right and justice have prevailed; that the Indians have been defended from fraud and imposition; that their creditors have been saved from being robbed and swindled; and that the interests of the community at large, and the obligations of the government, have both alike been attended to, the former subserved and the latter fulfilled.

In these declarations I will be abundantly sustained by a faithful history of the whole of the transactions from inception to termination.

Immediately upon my arriving here in 1849, I found great anxiety existing among the people to extend the area of civilization to the rich

Washington, to procure funds to pay for them, and for other purposes, returning as speedily as possibly before the steamboats ceased running.

This course I pursued, and leaving here on the 16th of September, I was enabled to reach Washington, transact the business, and return to the territory ere navigation closed, bringing with me the money which, though no disbursing officer of the government, I was entrusted with in my mixed capacity of special agent for the Indians ("to carry out a treaty stipulation") and superintendent of Indian affairs.

It was while in Washington on this occasion, that Mr. Hugh Tyler, the attorney for the Sioux traders and half-breeds, laid before me the papers marked A in my letter of the 14th ultimo.

I had been before aware of the existence of a document of the kind, but had never seen the original, nor a copy, nor understood its exact purport, except that the Indians at Traverse des Sioux, simultaneously with signing the treaty, had executed some paper by which they secured to their creditors the amount stipulated in the treaty, "to settle their affairs, and comply with their present just engagements, and which, as commissioner, I *knew* had been *intended* to pay their debts—though, by resolution of the Senate, we were prohibited from inserting any specific allowances for individual creditors.

Indeed, as you are well aware, without the assistance of the traders, secured by our *permitting* the Indians to set apart in the treaty a certain sum for clearing off their "engagements" to them, no treaty could have been effected at all; and, having permitted them so to do, the United States officers were under at least tacit and implied obligation, not to allow thereafter, any body, red or white, to render nugatory the stipulation.

On examining the document submitted to me by Mr. Tyler, I discovered that while not a power of attorney, it was a most *solemn acknowledgment*, made by the chiefs in open council, of their indebtedness to certain individuals, "pledging the faith of their tribe" for payment, and requesting, in the words of the treaty, that the United States would pay the individuals named the sums acknowledged to be respectively due them.

The aggregate of the sum they desired paid to their traders, was \$210,000, and they set apart likewise \$40,000 for distribution among their half-breeds, while \$25,000 was reserved "to remove and subsist themselves for one year,"—a sum amply sufficient, as all but one small band lived already in the reserve set apart for them.

The document was signed by all the chiefs and headmen who signed the treaty of Traverse des Sioux; was properly witnessed by a number of respectable citizens, and by the government interpreter on that occasion, not one of which witnesses, up to this time, has ever alleged to me anything against its entire validity.

Prima facie, therefore, it was a valid paper, to be respected and regarded as a solemn acknowledgment by the upper bands of their indebtedness.

On my return from Washington, a series of councils was held with the *Medaywakantoan* branch of the lower Sioux, in regard to the distribution of *their* debt fund, and other matters connected with the treaty and proposed payments

These councils were first held at the interpreter's house at the agency, situated on the high bluff on the left bank of the Minnesota river; but the Indians complained that the rooms were too small, and that it was, moreover, inconvenient for them to cross over the river, and they therefore preferred the request that they should in future meet me at Mendota, on the opposite bank of the river, on which side of the Minnesota also they were nearly all encamped. Their request being a reasonable one, the councils were thereafter held in the large rooms of the same warehouse in which the councils were held during the negotiation of the treaty. I make this explanation of so small a matter, because my meeting the Indians at a convenient place at their own request, where they might all assemble, is not the least among the grievous faults laid to my charge.

In the discussions at these councils with the Medaywakantoans, I discovered that the honesty of the Indians had been tampered with by sundry recently licensed and unlicensed traders, acting in concert with a number of half-breeds, and were, in consequence, disposed to repudiate their debts to their old traders entirely, should they once get the money into their own hands.

Indeed, all that I heard officially and unofficially forced me to believe that a *conspiracy*, having this end in view, existed, and I immediately formed the resolve to defeat the dishonest combination if I could.

I told the Indians that they, as well as myself, well knew for what purpose the hand money stipulated in the treaty was given and set apart. That it was principally to settle their affairs and comply with their *present* just engagements, or, in other words, to pay their just debts due and owing up to the signing of the treaty. That the money being set aside for this purpose, they, the Indians, had no right to divert it to any other purpose; nor had I the right, nor would I permit them so to divide the money; that they might consider about it, but that I should not pay the hand money until they had "settled their affairs" with their creditors, and designated in what manner and in what proportion it should be paid to those creditors.

This firm stand, in opposition to intended injustice and to a violation of a treaty provision, resulted, I am proud to say, in the defeat of the fraudulent conspiracy.

In a few days the Medaywakantoans came to the conclusion to do what was just and right and in accordance with the treaty, and presented me with a paper of which the following is a copy:

MENDOTA, November 9, 1852.

We, the chiefs of the Medaywakantoan band of Sioux and Dakota Indians, in open council assembled, do hereby acknowledge to have received of Alexander Ramsey, superintendent of Indian affairs, the sum of ninety thousand dollars, under the first clause of the fourth article of the treaty of Mendota, of the 5th of August, 1851. Seventy thousand dollars of which we desire him to pay in full acquittance of our just obligations at the date of said treaty to our licensed traders.

WAH-PAH-SHAH, (the Standard, or Redleaf,) his x mark.

WAH-KOO-TAY, (The Shooter,) his x mark.

TAH-O-YAH-TAY-DOO-TAH, (His Scarlet People, or Little Crow,) his x mark.

TAH-TCHAH-TOO-DOO-TAH, (Good Road,) his x mark.

SHAH-KPAY, ("Six,") his x mark.

WEE-TCHAN-KPEE, ("The Star,") his x mark.

MAH-RAH-HO-TAH, (Grey Metal,) his x mark.

HOO-YAH-PAH, (Eagle Head,) his x mark.

MAH-RAH-YAH-WAH-MAY-NO-HAH, (Ground Shell Metal, Medicine Rattle,) his x mark.

TCHAN-DOO-HOO-PAH, (The Pipe,) his x mark.

E-TO-KAN-A HA, his x mark.

MAH-HPEA-WEE-TCHASH-TAH, (Man of the Sky,) his x mark.

It will be perceived that of this \$90,000 receipted for, this paper sets apart only \$70,000 to pay their licensed traders. The balance of \$20,000 was, with the consent of the traders, and at the request of the chiefs, paid into their own hands for the alleged purpose of distribution by *themselves* among their half-breed relations. I regret to say, however, that of this amount the latter obtained but a small portion, and that portion was distributed in a shamefully unequal manner; nine-tenths of the lower half-breeds receiving nothing at all. This conduct of the Indians only confirmed me and all who witnessed the transaction in the opinion which experience in the Indian character so frequently confirms, that it is utterly unsafe to rely upon the abstract justice or impartiality of Indians when the power is in their own hands to gratify their cupidity, especially when, as in this case, outside influences for ulterior purposes had been busily engaged for weeks and months in undermining their, at best, very feeble principles of moral honesty.

This conduct towards their half-breeds was the more inexcusable as at the same time they had the \$20,000, their agent paid them, *per capita*, about \$55,000, a large sum for Indians to handle at once, with, besides, goods and provisions to a large amount.

The conclusion seems inevitable, therefore, from their conduct in reference to this comparatively small sum, that had they been permitted to seize upon the \$70,000, it also would have been either squandered in a useless manner or been unequally distributed, without regard to justice or previous indebtedness upon the new licensed or the old unlicensed traders, with perhaps a few favorite half-breeds, especially those who had lent the former their assistance to demoralize their Indian relations.

Having concluded business with the lower bands, the affairs of the Wah-pay-hoo-tays being previously arranged without difficulty, (as per my letter of January 14,) I proceeded to Traverse des Sioux to meet the Seeseetoans and Wahpaytoans, the bands parties to the upper treaty.

In one view of the case I need not have taken this journey. The question of the disposition of their band money was already settled. They had already twice, in open council of all the chiefs and headmen, exercised the restricted power reserved "to the chiefs," &c., to

divert the manner in which their \$275,000 debt fund should be paid and applied.

Their rights and authority in the premises were therefore *exhausted*; first by their "solemn acknowledgment" of indebtedness to their traders at Traverse des Sioux, July 23, 1851, and second by the execution of the combined "request" and power of attorney to me in open council, at St. Paul, on the 8th of September, 1852.

Other considerations, however, aside from this matter, induced me to visit the Traverse on the occasion of paying their annuities to the upper bands. It was the initiatory step of the new relations existing and thereafter to exist between them and the government, and as they were unacquainted with the forms of doing business, exigencies might arise rendering my presence necessary.

I was desirous, likewise, of investigating in person what foundation there was for the rumors industriously circulated of dissatisfaction among the upper bands with the disposition they had made of the band money.

Upon arriving at the Traverse, I found the Indians were only partially assembled, the unusually early setting in of winter having prevented the more distant bands about the heads of the Minnesota from attending in a body, though deputations of principal men from every band were upon the ground.

The first day after my arrival, the chiefs and headmen commenced laying before me their views and wishes on different subjects, and especially in regard to various points touching their future settlements and their reserves.

Another state of things, however, existed on the day following. I received notice from several of the chiefs that they were restrained from coming to visit me by a band of young men organized into what is termed a "*soldier's lodge*," who menaced them with violence and even death should they come to talk to me; and they wished me to send for troops to protect them.

This soldier's lodge I ascertained was organized by the chief of the Traverse des Sioux band, named Mah-rah-shaw, or Red Iron, acting as I found reason to believe, more under the influence and at the instigation of a recently licenced trader named Madison Sweetzer, at whose trading-house their chief and his "soldiers" held many of their meetings.

In the course of the day Red Iron and "his soldiers," accompanied by some of the other chiefs, the latter, (especially the upper chiefs whose bands were partly absent,) evidently overawed, and under restraint, came in a body to hold a council with me, at which he and his men behaved in word and manner so insolently that I was compelled from a sense of what was due to the government I represented, and for the preservation of the dignity of my official position in the eyes of the Indians generally, to abruptly close and dismiss the council.

I now became satisfied of the exact game intended to be played by the factious Indians and white men moving behind them.

It appeared that one band and part of another only were infected by the bribes and presents of the white conspirators, and that if left free to act, the rest of the chiefs and bands strongly desired to redeem their engagements to their old traders, and were content with the arrange-

ments already made on the 23d of July, 1851, and 8th of September, 1852.

The other, however, indicated by their language and action that they intended to prevent the payment of the annuities even, unless they could so far break up the arrangements alluded to as to admit their white preceptor in dishonesty to share largely in the distribution of the hand money, and likewise obtain for themselves a considerable slice off the same fund.

The painful position in which the officers of the government and the majority of the chiefs were placed by the desperate conduct of Ma-rashaw and his "soldiers" was happily relieved the next day by the arrival of a detachment of about sixty troops, principally infantry, with a few dragoons, under the command of Captain James Monroe, jr., and Lieut. Kelton, from Fort Snelling.

I immediately requested Captain Monroe to station his men so as to command the road by which access was ordinarily had to our quarters and council room, and to permit no chief coming to see their agent or myself to be attended by more than four of his men or "soldiers."

In the course of the day Red Iron, with his band of about forty "soldiers," well armed, accompanied by Mr. Sweetser, came down in a body from the latter's trading-house, and attempted to pass the troops to visit me, as they represented.

My orders were at once communicated to them, through a competent interpreter, by Captain Monroe; but Red Iron himself was told that he could go through, with from one to four of his men, but no more.

This his "soldiers" loudly refused to permit, and eventually they all retired, not, however, until their persistence in endeavoring to pass through, after being stopped, had caused the troops to handle their arms, and nearly produced a collision, (barely averted by the forbearance of Captain Monroe,) which must have resulted deplorably fatal to the ill-advised chief and his men.

This slight check, however, had little effect upon their after conduct. The Indian "soldiers" still continued their organization, parading about the prairie from camp to camp, or to Mr. Sweetzer's trading house, flourishing their weapons and discharging their guns in bravado, over-awing the chiefs and suspending the transaction of all business whatever.

In this condition of affairs there seemed but two alternatives, one was to leave Mr. Sweetzer and his fellow conspirators, with the few Indians he controlled, masters of the field, at full liberty to pursue his machinations to obtain possession of the fund plainly set apart to pay the Indian debts contracted *prior* to the treaty.

The other alternative was, in pursuance of my instructions of October 4, 1852, to regard the "suffering condition of the Indians, *in connexion with other interests involved*;" and make the annuity payment at all hazards, as well as maintain, at every risk, the authority of the government.

The latter alternative, though the least pleasant for myself, I felt it my duty to adopt. The first step I conceived to be the suppression of Red Irons' "soldiers' lodge." I sent to the chief requesting him

to come and see me as I wanted to talk to him on the subject. He did not come. I sent an interpreter to him again, making the same request. He once more disregarded it. I sent him the day following a like request by Lieutenant Kelton, attended by two interpreters, one as a check upon the other, to insure the correct interpretation of my message. He said he would come by a specified time. We waited two hours after the period he had set, and in the meantime saw him pass by at a distance, going with his soldiers to attend a feast.

Upon this last exhibition of contempt and contumacy, at my instance, Captain Munroe dispatched Lieutenant Kelton, with a sufficient detachment, who arrested him in the midst of his "soldiers" and festival and brought him into my presence.

To my inquiries he was able to allege no reason for not complying with my repeated messages, except that he and his soldiers had been prevented coming to visit me on a former occasion by the troops.

I told him he had taken to himself bad advisers and had acted badly; that his men under his direction were acting badly; and that inasmuch as at the treaty in July, 1851, *I had made him a chief*, in the hope of his guiding his people to do good and restraining them from evil, but had been disappointed—he having behaved the reverse of what I expected of him—that I therefore *broke him of his chieftainship*, as unworthy of such a position.

I then remanded him into the custody of the troops, to remain a prisoner until such time as his men should disband their "soldiers' lodge" and behave themselves in a peaceful manner.

This stroke was decisive. The "soldiers" immediately broke up their lodge, and the next day, at noon, brought the other chiefs with them to announce to me what they had done, and they begged the release of Red Iron from custody.

I took the opportunity to make them all understand, that when their Great Father sent his officers among them, to confer with them and their chiefs, one band had no right to interdict, by any regulation or combination of their own, the chiefs of other bands visiting and doing business with such officer or officers; that each band had the privilege of instructing its own chief what to say and do in their public councils; but not of over-awing or dictating to other bands or their chiefs, and the latter course would always be visited with displeasure and punishment.

Red Iron was then released, with an admonition as to his future behaviour, but was not restored to his chieftainship. He expressed himself sorry for his conduct, and said he had been "badly advised" by a white man.

After this, no further difficulty was experienced. The chiefs, relieved from the menaces of the "soldiers," freely acceded to the arrangements for the annuity payment; their bands were enrolled, and their annuities paid over to them by Agent McLean.

The chiefs all, with two or three exceptions, expressed their satisfaction with the disposition before made of their band money, for the payment of their debts, and desired that it should be adhered to.

The trader Sweetser, however, made an effort after this to seize at least a portion of the money, ere it passed entirely out of his reach.

His party of Indians waited upon me a day or two subsequent to the dispersion of the "soldiers' lodge," and presented a paper, (written in Dakota, by an educated Indian employed by him as a small trader,) to which was attached, in the same hand writing, a number of Indian names which I could not know were those of chiefs, or that it was adopted in public council, being witnessed on its face by neither private citizen or public officer.

To this piece of waste paper I supposed is referred, by the allegation in the suborned affidavits, that the Indians requested me "to distribute *equally* among *all* the half-breeds of the tribe the sum of \$60,000," as it is the only paper of any kind in which the sum of \$60,000, (instead of \$40,000, the amount given on the 23d of July, 1851,) is proposed by any body to be distributed "among the half-breeds."

The "*equality*" of the distribution which this paper makes, however, may be judged by the fact that it pays no regard to the number in each family, but puts down four half-breeds for gross amounts of \$8,000 each, others for \$2,000, \$1,500, \$1,000, and so on, while it leaves out of the distribution entirely quite a hundred individual half-breeds, who are included in the original distribution of 1851, a fact that would seem to indicate that the word "all" as well as the word "equally" must have different meanings in the vocabulary of Mr. Sweetser and his associates, from those attached to them in the standard dictionaries of the day.

But, while taking care of sundry favorite half-breeds, this paper was "*equally*" careful of Mr. Sweetser.

The list of creditors of the Indians, on the distribution paper of 1851, embraces twenty-four claimants and traders, whereas this last concoction of Mr. Sweetser, a few half-breeds and few demoralized Indians, makes a farce of even-handed justice by the following distribution to traders, viz :

Mr. Sibley.....	\$20,000
Mr. Sweetser.....	10,000
Mr. McLeod.....	8,000
Mr. Jos. R. Brown.....	8,000
Mr. Laframboise.....	6,000
Mr. Louis Roberts.....	5,000
Mr. Dousman.....	6,000
Mr. McKenzie.....	5,000
Mr. Francois Frenier.....	1,000
Mr. Renville.....	1,000
	<hr/>
	\$70,000

Mr. Jos. R. Brown is the only one on the previous list whose distributive share is increased in the above, being \$1,500 greater. Mr. Dousman, *who was not a claimant* at all, is assigned \$5,000, and Mr. SWEETSER, who never came into the country until three or four months *after* the negotiation of the treaty, and of course could hardly have *his* claims, good or bad, included under the treaty phrase of "our *present*

just engagements." This Mr. Sweetzer is modestly put down by his creatures for the round sum of \$10,000—a considerable falling off, it is true, from the high anticipations of his advent in the country, when he essayed to grasp the entire fund, but still a little surprising when it is considered that Mr. Sibley, for nineteen years at the head of the Indian trade in this region, and employing an immense capital, is allowed but double the sum claimed by this in-comer of a year's standing; and that Mr. McLeod, a trader in the country for fifteen years, Mr. Laframboise, a trader between twenty and thirty years, and the Renvilles and Freniers, from time out of mind, are acknowledged as creditors in amounts far below this trader of yesterday.

I would hardly have noticed this paper so particularly, did it not exhibit the sinister motives actuating the pack now hurling their venom against myself and others, by whom they were foiled in the schemes for robbery and injustice. Of course, I paid no attention to a document which was such a manifest concoction of fraud and roguery.

Before I left the Traverse, I had furnished me another evidence of the entire satisfaction of the Indians with the distribution of their debt fund on July 23, 1851, and with the act of their council at Saint Paul, September 8, 1852, which turned the whole matter over to my discretion. This they exhibited by coming voluntarily forward, and signing the following instrument :

NOVEMBER 29, 1852.

We, the chiefs of the Seesetoan and Wahpaytoan bands of Dakota, or Sioux Indians, in open council assembled, do hereby acknowledge to have received of Alexander Ramsay, superintendent of Indian affairs, the sum of two hundred and fifty thousand dollars, under the first clause of the fourth article of the treaty of Traverse des Sioux, of July 23, 1851.

Two hundred and ten thousand dollars of which we desire him to pay, in full acquittance of our just obligations at the date of said treaty, to our traders, agreeably to the distribution made at the time of the treaty aforesaid, and the balance to our relations of mixed blood.

EE-TAY-WAH-KEEN-YAN, (Thunder Face, or Limping Devil,) his x mark.

WAH-NAH-KSOON-TAY, (The Walnut or Blunt Arrow,) his x mark.

YAH-ZHAA-PEE, (The Wind Instrument,) his x mark.

O-KEE-TAH, his x mark.

EE-TCHAH-SHKAN-O-MAH-NEE, (Who Walks Shaking,) his x mark.

WAH-AH-NAH-TAH, his x mark.

NO-GHO-PTAN, (The Listener,) his x mark.

WAM-TCHEE-PI-DUTA, his x mark.

A-KIPA, his x mark.

ESH-TAH-HU-TAH-KVASH-HAH, (Young Sleepy-eyes,) his x mark.

O-TAHKA-TAY, (Plenty Killer,) his x mark.

HOOPAH-EN-APAH-DOO-TAH, (The Upper End,) his x mark.

Witnesses:

THOMAS FOSTER.

JOHN C. KELTON, U. S. A.

CHARLES D. FILLEMORE.

WILLIAM HENRY FORBES.

In addition to the chiefs signing the foregoing, one of the oldest and most distinguished chiefs of the upper bands, (detained away from the Traverse in November, by the early winter,) called by the whites "Big Curly," or "Grand Frise," has transmitted the following paper, signed by himself and principal "soldiers," which may be considered of similar tenor with the one above quoted. It is witnessed, it will be perceived, by the Rev. S. R. Riggs, the respected missionary at Lac qui Parle:

"To the Hon Alexander Ramsey, Governor of Minnesota, and Mr. Nathaniel McLean, Indian Agent:

"We, the chiefs and braves of the Wah-pay-toan-wan Dakotahs, at Lac qui Parle, do, of our own accord, hereby signify our assent and consent to that part of the treaty of 1851, which gives a portion to the traders and half-breeds; and we desire that it may be carried into effect as speedily as possible.

"In testimony of which we hereunto affix our names and marks:

"OO-PEE-YAH-HDN-YAH, (Extending Brain, or Big Curly,) his x mark.

"WEE-YAH-HAN-NOAN-PAH-KEEN-YAN, (Twice Flying,) his x mark.

"WAH-KAH-MAH-NEE, (Walking Spirit,) his x mark.

"MAH-PEE-YAN-HUAH-SHKAN-SHKAI, (Morning Cloud,) his x mark.

"OH-EEN-YAH-PAH-YAH, (Head That Runs,) his x mark.

"MAH-YAH-DOO-TAH, (Red Metal,) his x mark.

"MAH-KOH-EE-DOO-ZAH, (Earth Holder,) his x mark.

"Witnesses:

"S. R. RIGGS.

"LORENZO LAWRENCE."

In taking from the upper chiefs the receipt of November 29, 1852, I did what might be held a work of supererogation; for their action already twice before would seem to have completely exhausted their limited control over the hand money, especially, as on the 8th of September they had settled in myself a comprehensive power and discretion to act for them—that is to say, in case the paper of July 23, 1851, was, as some whites pretended, invalid, to distribute the money at my discretion, in such manner as would best carry out the true intent and meaning of the treaty—or, if that paper *was* valid, to act for and instead of the Indians, in receipting to the United States for their money, and then pay it over to their creditors, according to the distributive list originally made out. Still, as so much false clamor was raised, I thought the paper would be in the nature of cumulative evidence, showing persistence by the majority of the Indians in their intentions, and "manner" of doing justice to their old creditors.

One more document, emanating from Traverse des Sioux, dated December 3, 1852, and purporting to be the action of a "majority of chiefs" of the upper bands, demands some comment, ere I dismiss this branch of the subject. A copy of the paper I allude to was under the same date of January 22, along with the affidavits transmitted to me from the department, where, I suppose, the original is on file.

But slight examination of this paper is needed to safely pronounce it another of the conceptions of Mr. Sweetser, backed by a few Indians of no note, whom he gathers into his trading house, and buys or coerces into assenting to his prolific assortment of "irrevocable" powers of attorney; distributive lists giving him \$10,000, protests, requests, one of which, failing its intended purpose, is immediately followed by a fresh document, which, though signed by a variety of new names, in each case gravely vouched for as being the act of a "majority of chiefs," &c.

In the paper in question, Mr. A. J. Campbell, said to be a half-breed interpreter, in Mr. Sweetser's employ, not only swears that "his true interpretation make of the contents of the said instrument to the council," but "that it (the council) was composed of a majority of chiefs of said bands!"

On looking over the signatures appended, I discover that the name of but two chiefs are signed to the document, and only one of them, "Big Gun," can be admitted to have, *perhaps* signed it with a knowledge of its contents.

The other chief, E-tay-wah-keen-yau, or "Limping Devil," has successively signed the debt fund distribution of July 23, 1851, the power of attorney to me of September 8, 1852, the receipt of November 29, 1853, and frequently, besides, expressed to me his satisfaction with what was done—the conclusion cannot be avoided that there is no correct interpretation to him of the contents of the paper—a position that is not at all weakened by the *erident falsehood* which the interpreter swore to, when he declares, in his affidavit before Squire Dodd, that the council "was composed of a majority of the chiefs of said bands."

It will not be necessary to dwell further upon this paper, which bears fraud and deceit stamped on its very front, and is obviously of no validity or account whatever.

The falsehood it embodies, aside from the defects in its execution, would deservedly discredit it, were no other objections to it tenable. For instance, in the third paragraph Mr. Sweetser asserts (under color of his deluded Indians) that the distributive list of July 23, 1851, was calculated to do great injustice to a large number of our most meritorious creditors."

It is sufficient answer to this, if answer it requires, to say, that to this hour I have *not heard of even one trader* to whom the upper Indians were indebted prior to the treaty of Traverse des Sioux who was omitted in that list, and I do not believe a single ante-treaty creditor can be found who was not provided for in that distribution.

On my return, therefore, from Traverse des Sioux to St. Paul, in my position in relation to the government, the Indians, and their creditors, and in reference to the fourth article of each treaty, seemed about as follows:

Treaty of Mendota.—Under this treaty the Me-day-wah-kan-toans, to pay their old debts and remove and subsist *themselves* for one year, were entitled to receive from the United States \$110,000, and the Wah-pah-koo-tays also \$110,000.

On the 8th of November, 1852, the Wah-pay-koo-tays, by their receipt to me, as superintendent of Indian affairs, for \$90,000, acquitted and discharged the United States of that much of the obligation to pay \$110,000, leaving a balance due from government of \$20,000.

On the 9th of November, 1852, the Me-day-wah-kan-toans likewise, by a similar receipt to me for \$90,000, acquitted and discharged the United States of so much of their treaty obligations, leaving a balance still due of \$20,000.

Thus \$40,000 of the aggregate sum is all that is unreceipted for, and this is to be applied, under the treaty, to the removal of both bands, and their subsistence for one year.

The Wah-pay-koo-tays, after discharging and acquitting the United States of the sum of \$90,000, in the same receipt placed this money in my hands, and requested me to pay it over, "in full acquittance of our just obligations at the date of said treaty, to our *licensed* traders."

The Me-day-wah-kan-toans in like manner, after acquitting the United States of \$90,000, placed \$70,000 of it in my hands, and desired me to pay that sum over, "in full acquittance of our just obligations at the date of said treaty, to our *licensed* traders."

I was thus specially empowered by all the Mendota treaty Indians to "settle" with their creditors, and pay over to them, in liquidation of all Indian debts prior to the treaty, the sum of \$160,000, in full discharge of the "engagements" of both the lower bands.

Previous to visiting the upper Indians, however, I had disbursed the \$90,000 debt fund of the Wah-pay-koo-tays. This band, before Agent McLean, early made a distribution of their hand money among their creditors, and the validity of this distribution having never been disputed or impugned in any manner by either Indians or whites, I gladly availed myself of an opportunity, previous to departing for Traverse des Sioux, to relieve myself from the anxiety of its care by paying it over to their licensed traders, for whose receipt and other matters incident to this payment I refer to my letter of January 14.

Consequently, on my return from the Traverse, I had but the \$70,000 debt fund of the Medaywahkantoans in my possession, in trust for their creditors.

Treaty of Traverse des Sioux.—The hand money accruing to the upper Indians by this treaty, was one undivided aggregate of \$275,000.

By the paper of distribution so often referred to which the two upper bands executed at Traverse des Sioux in 1851, they assigned \$210,000 of this aggregate to "settle" with their traders; and with the assent of the latter \$40,000 more was set apart for the half-breeds, leaving \$25,000 unappropriated.

By the subsequent comprehensive paper executed at St. Paul, September 8th, 1852, they gave me power to ask, receipt for, and control the whole of the \$275,000, "to do, or cause to be done, all the acts contemplated by the said fourth article for and by us to be done, to

appropriate the said money in accordance with, and for the purpose of carrying out the equitable and true intent thereof, all such acts, when done to be final and binding upon us, and to have the same force and effect as if done by us."

Under the comprehensive authority and wide discretion conferred by this document, *my* receipt for the money discharged and acquitted the United States of its obligations under the first clause of the first article of the treaty, especially as the Indian appropriation bill, which prohibiting the drawing of Indian money by powers of attorney in general, particularly recognises their validity when carrying out the stipulations, which stipulations at any rate, as they were in this case, would be paramount without the exception specified.

But besides *my* receipt, to render "assurance doubly sure," the receipt of the upper chiefs of November 29, 1852, fully re-acquits the Government for \$250,000 of the amount; and simultaneously re-enters me with their money to that amount, with an accompanying direction to pay over, in their behalf to their creditors (not "the creditors of the United States") the sum of \$210,000, together with \$40,000 to the relatives of mixed blood, as per distributive paper of July 23, 1852, the validity of which the chiefs re-affirm.

My position on my return from Traverse des Sioux upon a review of the whole case, was, therefore, unquestionably this; that I was a *special agent for all the Indians*, with \$320,000 of *their* money, yet in my possession, in trust for a certain specified purpose, and that purpose the payment of *their* debts that were incurred previous to the treaties, not for the payment of the debts of the United States.

My first step towards settling with creditors of the Indians was, unquestionably, to ascertain *who were the "licensed traders,"* that being the class of creditors the Indians expressly limited the discharge of their obligation to. A certificate from Mr. Prescott, the interpreter at the Sioux agency, furnished the desired information. (See letter of January 14.)

The next step I conceived properly to be, to require all licensed traders having claims upon the Indians to *prove their accounts by oath*. This was done, and an abstract of the several accounts sworn to will also be found in my letter of January 14.

I in this manner ascertained that the debts of the *Medaywaka* amounted to \$129,885.10, or \$59,885.10 more than the Indians placed money in my hands to discharge.

I also found that the See-see-toans and Way-pay-toans owed \$431,778, an excess of \$221,735.78 over the funds they had entrusted to me for entirely liquidating their indebtedness.

In a word, to clear off \$561,620.58 of indebtedness, I had \$320,000 of funds.

In order to revolve in my mind the best method of both attaining the object of my trust and of satisfying the traders, I deferred settling with the latter for a few days, some official business, accumulated during my absence, likewise requiring my more immediate attention.

In the meantime, the traders and half-breeds, collected at Mendota, their old trading post, became, it seems, impatient at the delay; and

a short time I was waited on, in their behalf, by Hugh Tyler, esq., their attorney, with whom I before had communication in that capacity.

Mr. Tyler urged the anxiety of his clients for a settlement, and presented me with two papers, one signed by the traders and half-breeds of the upper Indians, and the other signed by the licensed traders among the Medawaykantoans, in both of which they formally "authorize and request" me to pay the several sums due them, respectively, under said treaties to *their agent*, "*agent and attorney, Hugh Tyler, esq.,*" and "authorizing and empowering him to receipt for the same;" and declaring that such receipts should be "*in full discharge and acquittance,*" of their "*claims against the Indians*" up to the dates of the respective treaties. Copies of both of these powers of attorney to Mr. Tyler may be found in my letter of January 14, often before referred to.

The presentation of these documents at once relieved me of considerable difficulty.

I was aware of the high confidence which the claimants most largely interested in the debt-funds reposed in Mr. Tyler's integrity and intelligence, and my own acquaintance with him justified them in their confidence.

I accordingly did not hesitate paying over to Mr. Tyler, as attorney for traders and half-breeds, "*the entire amount of the funds in my hands for their benefit, taking his receipt therefor,*" in *full discharge and acquittance of all demands against the Indians up to the period of the negotiation of the treaties.*

Copies of Attorney Tyler's receipts will be found also accompanying my letter of January 14.

These receipts, from the traders and half-breeds, per Mr. Tyler, their attorney, concluded my responsibilities in respect to the hand money of the two treaties, except \$40,000 belonging to the two lower bands, retained for their removal and subsistence, and \$25,000 belonging to the upper bands, placed in my care by their council of September 8, 1852, for disbursement for the same purposes.

Thus, as officer of the United States, I had secured a release of the government from its treaty obligations by the payment of the money to the Indians; thus, as the special agent of the Indians, I had obtained from the traders and half-breeds the release of the Indians from the total of their debt "engagements."

Beyond this, I felt I had no legal concern or responsibility. The details of the division of the money among the traders and half-breeds, assembled at Mendota, I supposed might be safely entrusted to themselves and their attorney, Mr. Tyler, with it further, I saw no obligation to meddle. So also, the arrangements between Mr. Tyler and his clients for compensation or per centage was a matter with which I had no call to interfere. The Indians and the United States being legally satisfied, the remainder was strictly a business transaction between attorney and clients, in which none but themselves were interested. Nor have I ever seen a particle of evidence, *from those who participated in the Mendota payments*, impugning the fairness of the distribution there made.

That some of the half-breeds disliked awarding any compensation to their attorney, Mr. Tyler, is quite probable; but even the very men

whose dissatisfaction on this single head made them the tools for affidavit-mongers, (see depositions annexed,) even they testify that the compensation paid Mr. Tyler was optional with themselves—that there was no compulsion.

In truth, the clamor on this point comes entirely from outsiders—from the perjuring conspirators—who mystify the public mind by distortion of the facts. The measure of credit which these creatures should receive may be gauged by the public and the government from an examination of the affidavits they suborned, and their comparison with the affidavits hereto attached.

Another occasion for clamor and misrepresentation has been the character of the funds which their own attorney disbursed among clients, the creditors of the Indians.

My inquiries on this point, however, convinced me that nothing was paid out by Mr. Tyler but gold, or its equivalent; and he certainly received from the Indians, through me, nothing of less value than our national currency.

In this connection it occurs to me to remark, that it does not appear for what purpose exactly was forwarded from the department a copy of an isolated *draft*, purporting to be drawn by me, for \$500, in favor of Hugh Tyler, esq., the original of which is understood to have been exhibited to the Secretary of the Interior, by the Hon. Mr. Sweetser, a member of Congress from Ohio, and brother of the trader Sweetser, whose operations in this direction have been referred to.

No verified statement, from any quarter, accompanies the draft, as to the manner of his coming into possession of it; and, for aught that appears to the contrary, the holder has merely taken this roundabout course to ascertain the extent of my private credit, and whether my paper was worth its face—information which could have been more easily reached by presenting the draft, if genuine, at the counter of any respectable bank in New York city, on which it was drawn, and demanding its face in American gold. It may have been exhibited, however, as a specimen of the “*depreciated drafts*,” spoken of in the affidavits suborned by his brother, the trader; and if so, the deposition of Mr. Oakes, hereto attached, marked CC, may be useful in fixing the exact amount of its depreciation below gold and silver!

I would observe, likewise, that it has been my uniform practice, whenever in my power, since my residence in the Territory, to furnish the business community here with drafts and checks on St. Louis and eastern cities, without ever making a charge or requiring a per cent. for the accommodation; upon which fact Mr. Sweetser may possibly find another complaint, as such profitless transactions are most certainly an interference with the brokerage business of the country, and materially tend to diminish its profits!

Accompanying this communication, and marked HH, is a copy of a letter addressed by H. L. Dousman, esq., an eminent citizen of the northwest, to the United States Senate, pending the ratification of Sioux treaties.

I incorporate it in this “*explanation*,” because it properly exhibits the origin of the difficulties which have arisen in regard to the funds

cruing under the Sioux treaties, and the motives of those who have been most active in creating them.

As incidental also to a correct understanding of Mr. Dousman's allusions to the trader Sweetser's operations, I transmit a copy of the extraordinary power of attorney which he fraudulently imposed on a portion of the Indians at Traverse des Sioux. The whole scope of this paper, it is believed to be susceptible of proof, was never interpreted to the Indians; Joseph Campbell, who was the interpreter employed by Sweetser, having since averred to a citizen of standing and respectability that all that he interpreted of the power of attorney was what Sweetser told him to say, *which was different from what he afterwards found the document to be.*

To what I have already expressed I have little in conclusion to add, except that it is my strong desire to have a full and complete investigation of all matters involved in the late Sioux disbursements, and that I hold myself in readiness to respond promptly to any further call for explanation in regard thereto. My whole conduct in these disbursements I have passed under my own mental review, and I cannot observe that in any particular I would change my action, if the whole affair was to be gone over again. I can sincerely say, that in all that I did a single motive actuated me, and that was, to carry out the policy of the government in regard to the Indians, and to award to all interested, red and white, what was just and right, so far as I could determine it.

Very respectfully, your obedient servant,

ALEX. RAMSEY.

Hon. LUKE LEA,

Commissioner of Indian Affairs, Washington, D. C.

AA.

TERRITORY OF MINNESOTA, }
 County of Ramsey, }

Louis Anger, being duly sworn according to law, doth depose and say, that he is *not* "a half-breed," but a Canadian, intermarried with a Sisseton Sioux woman; that, in right of the children by his wife, five in number, he claimed a participation in the sum of forty thousand dollars distributed by the chiefs, &c., of the Sisseton and Warpeton bands among their half-breed relatives, but his name and that of his children were omitted by the Indians in their distribution at Traverse des Sioux, made on the 23d day of July, 1851. Upon a representation of this fact to Governor Ramsey, he directed that your deponent should participate in this fund to the extent of two shares, as he did, and was paid at Mendota by his attorney, Hugh Tyler, *in gold and its equivalents*; but he was not told by Tyler, nor by any other person, that unless he permitted a reduction of fifteen per cent. he would receive nothing; he was never given to understand that there was any such condition.

Your deponent *cannot read* manuscript; and upon having now exhibited and explained to him the deposition that he made before Or-

Orlando Simons on the 15th day of December, 1852, he finds he has been *grossly imposed upon, and made to swear to matters that are grossly untrue and to others of which he knew nothing.*

That your deponent wished that *all* his children, five in number, should have each had a share. He was met by Madison Sweetser in St. Paul after the payment, who handed the deposition, that paper which he swore before Orlando Simons on the 15th December, 1852. Sweetser told him to show the paper to no one, but to go before Esquire Simons and make oath to it, and that then he (Sweetser) would procure him (Anger) payment for his other three children; that neither by Sweetser nor by Esquire Simons was the deposition either read or explained to him, and all your deponent thought he was doing was an effort to procure further payment to his half-breed children.

That your deponent verily believes and knows that *some* members almost *all* the families connected with the Sisseton or Warpeton Sioux have participated in the distribution of the half-breed money, and that but few individuals have been omitted. This deponent and all others that fell within his observation *were paid in gold or its equivalent*, as your deponent does not know of any one half-breed paid in either "depreciated drafts or notes."

Your deponent is not aware that the Indians, at any time, requested Governor Ramsey to divide sixty thousand dollars *equally* among the half-breeds of the tribe; and so far as his knowledge goes the payment was fairly made.

his
LOUIS x ANGER
mark

Witness:

ANTONIO FINDLEY.

Sworn to and subscribed before me at St. Paul, this 22nd day of February, 1853.

TRUMAN M. SMITH,
Justice of the Peace.

MINNESOTA TERRITORY, } ss.
Ramsey County.

Louis Anger on his solemn oath further says: That on the day I made his first affidavit, Sweetser enquired of him for George and John Le Blanc to make affidavit—that deponent said, *they were on a head-spre*—Sweetser said "*that makes no difference, tell them to come at once.*"

his
LOUIS x ANGER.
mark

Sworn and subscribed before me at St. Paul, this 22nd day of February, 1853."

TRUMAN M. SMITH,
Justice of the Peace.

BB.

TERRITORY OF MINNESOTA, }
 County of Ramsey. } ss.

Peter Rouillard being duly sworn according to law, doth depose and say: That in right of his children, he was interested in the recent payment to the half-breeds of the Sioux nation, those bands participating in the making, &c., of the treaty of Traverse des Sioux; that in the distribution made at Traverse des Sioux, of the sum of forty thousand dollars, by these Indians, (at the time of making the treaty in 1851,) among their half-breed relatives, the name of this deponent *was omitted*, as were the names of his wife and children; but upon representation to Governor Ramsey, he directed that your deponent should participate in this fund, as he did, and was paid at Mendota; but your deponent desired that there should be a share (\$250) paid to each of his children, which was not done, and *this is the only fact* that he thought he was testifying to in his deposition of December 15, 1852, before Orlando Simons, esquire; but as your deponent does but *imperfectly understand* the English language, and *cannot read* manuscript, he finds, upon having said deposition read to him, that *he has been grossly imposed upon*, and made to say and swear to matters of which he *knew nothing*; that to the best of the knowledge and belief of your deponent, nearly all the half-breeds who had relationship to those Indian parties to the treaty of Traverse des Sioux participated in the half-breed money.

That the money he received, and so far as his observation extended, the money received by others, half-breeds, &c., under this treaty was *of the highest character, gold or its equivalent*, that *he saw no depreciated paper* paid out.

That your deponent signed a power of attorney or authority to Hugh Tyler to receive the money to which he was entitled of Alexander Ramsey, superintendent, &c; and he does not believe, nor did he mean to say that there was anything improper in the payment.

his
 PETER x ROUILLARD.
 mark

Sworn and subscribed to before me this 15th February, 1853.

TRUMAN M. SMITH,
Justice of the Peace.

CC.

MINNESOTA TERRITORY, }
 County of Ramsey. }

Vital Boger, being duly sworn, doth depose and say: That he has heard read the foregoing deposition of Pierre Rouillard, and had it fully translated and explained to him, and upon his solemn oath doth depose and affirm, all that is said in the deposition, except what refers personally to Pierre Rouillard, that the deposition that it is *pretended* he made on the 15th December, 1852, before Orlando Simons, and the *whole of that*

statement is a fraud upon him, except that one of the children for whom he was to have been paid on the list made by the Indians was taken off, and that he paid Hugh Tyler fifteen per cent., but he was not paid by Tyler or any one else that if he did not pay this he would receive nothing.

his
VITAL X BOGE
mark

Sworn and subscribed to before me this 15th day of February, 1851
TRUMAN M. SMITH,
Justice of the Peace

DD.

MINNESOTA TERRITORY, } ss.
Ramsey County.

Alex. R. McLeod, being duly sworn, doth depose and say: That on the right of his wife he was interested in the distribution of money made among their relatives of mixed blood, by the Indians parties to the treaties of Traverse des Sioux; that in the distribution, as made by the chiefs, &c., at Traverse des Sioux, on the 23d day of July, 1851, his wife had two hundred and fifty dollars set apart as her share; *he signed an authority or power of attorney to Hugh Tyler, esq., to receive this money of Alex. Ramsey, superintendent, &c., which he did, and paid me that sum, less fifteen per cent.; he (McLeod) was paid in cash or its equivalent, and not in "depreciated drafts or notes," nor did the case of payment, on this occasion, come under the notice of your deponent wherein "depreciated drafts or notes" were paid. Your deponent is not aware that the chiefs or Indians parties to either the treaties of Traverse des Sioux or Mendota "requested Alex. Ramsey to distribute sixty thousand dollars equally among all the half-breeds of the territory; he does not know, that "to the extent of one half of the half-breeds thereabouts, have been refused payment;" to the best of the knowledge and belief of your deponent, they generally all participated in the payment.*

Your deponent was not *compelled* to allow Hugh Tyler, his attorney, fifteen per cent., nor was he informed by Tyler, or any one else, unless he submitted to this reduction of fifteen per cent., he would receive nothing; he was not "compelled to resort to Hugh Tyler for payment," but did so voluntarily.

Your deponent does not know that Governor Ramsey, at any time, held secret councils at night, at Sibley's house, with the chiefs, to induce them to sign his receipts; nor does he know of any effort to bribe the chiefs to sign such receipts. Your deponent never heard Governor Ramsey in open council declare that unless seventy thousand dollars were set apart for the payment of their debts he would withhold their annuity.

That your deponent does not know that the money set apart in the fourth article of the treaties was handed to the claimants for their divide, without regard being had to the amount of the indebtedness.

the Indians. All your deponent intended to complain of, and of which he desired to make affidavit, was the payment of fifteen per cent. of all the half-breeds. The *deposition it is pretended I made* on the — day of December, 1851, before J. Van Etten, esq., is *full of gross misrepresentations*, but from *the excitement* I was under at the time *I did not know what was in it*.

A. R. McLEOD.

Witnesses:

J. W. SIMPSON,
J. VAN ETTEN.

Subscribed and sworn to before me, this 26th day of February, A. D., 1853.

J. VAN ETTEN,
Notary Public, Minnesota.

OFFICE OF THE SECRETARY OF MINNESOTA TERRITORY,
St. Paul, February 26, 1853.

I, Alexander Wilkin, secretary of said Territory, do hereby certify, that J. Van Etten, notary public, before whom the annexed affidavit of Alex. R. McLeod was taken, was at the time of taking thereof, and now is, a notary public in and for Ramsey county, Minnesota, legally commissioned, sworn into office, and duly authorized to take depositions, acknowledgments of deeds, and do other official acts, and to all of his said official acts full faith and credit are due and ought to be given.

In testimony whereof, I have hereunto set my hand and affixed the great seal of the said Territory, this twenty-sixth day of February, in [SEAL.] the year of our Lord one thousand eight hundred and fifty-three, and of the independence of the United States of America the seventy-seventh.

ALEX. WILKIN,
Secretary of Minnesota Territory.

EE.

TERRITORY OF MINNESOTA, }
Ramsey county. }

W. H. Forbes, being duly sworn, doth depose and say: That he is a citizen of Saint Paul, and has lived in what is now the Territory of Minnesota since the year 1837; that he acted as the interpreter to Governor Ramsey in his councils with the Medawakantoan and Wah-pay-koo-tay Sioux Indians in the fall of 1852, in reference to their payments under the treaty of 1851; "that Governor Ramsey convened the chiefs, &c., at the Indian agency near Fort Snelling, but the only house that could be used in this way, and for this purpose, was that in which the interpreter at the agency, P. Prescott, resides. It was found to be entirely too small, and the Indians and half-breeds could neither see nor hear what was going on. This gave dissatisfaction, and the

chiefs requested that their future councils might be held at Mendota, which was more convenient to the camps of most of them, and was at the homes of almost all the half-breeds interested. Governor Ramsey frequently told them that he would meet them most cheerfully at any convenient place they might propose. Subsequently to the first meeting at the agency, one of the chiefs requested a second meeting at that place, which Governor Ramsey assented to, but the chiefs and braves did not attend, alleging that there was not room enough for them at the agency. I knew that for this reason most of the councils after the first were held at Mendota.

In counselling with these chiefs he did not insist upon any specified sum being set aside to pay their debts, or to distribute as a gratuity among their half-breed relations. It was only after repeated counselling with these Indians that, on the advice of some of the chiefs, he recommended a distribution of the sum of ninety thousand dollars, in the manner subsequently made by the Medewakatoan chiefs.

For a time, a majority of the chiefs, as was well known, under the influence of the half-breeds, insisted upon receiving into their own hands the whole sum of one hundred and two thousand dollars, without leaving anything in the hands of Governor Ramsey to provide for their removal, &c. Many of the chiefs, at an early day even, were disposed to allot an amount of money to pay their debts, &c., but it was some time before they could muster courage to utter that sentiment in council, overawed as they were by the young men, who desired all the money.

I witnessed the payment of money of the half-breeds by Mr. Tyler; but neither in his payment to others or to me (in right of my children) did I hear him insist upon the payment of fifteen per cent. to him, or threaten if it was not paid him he would pay nothing; nor did I hear him or others insist upon the payment of debts due H. H. Sibley. So far as my observation went, each half-breed did in this matter as he pleased.

Mr. Tyler stated to me and to others that expenses had been incurred by him as the attorney of the traders and half-breeds, &c.; that it had been agreed he should retain fifteen per cent. to reimburse these expenses, and for his compensation; but I never heard him insist upon these terms. All the time of the payment I was present, but never witnessed the paying out, by Tyler, of *depreciated notes* or drafts. All the money paid was either gold or its equivalent, to the best of the knowledge and belief of your deponent.

Your deponent was present, and witnessed the designation, by the chiefs, &c., at Traverse des Sioux, in July, 1851, of the half-breeds, and the amounts they were to receive under the treaty, and the setting apart of two hundred and ten thousand dollars in liquidation of their debts; and your deponent is convinced that they knew as well what they were about as did the whites and the half-breeds that were present.

WM. H. FORBES.

Sworn and subscribed before me this 24th day of February, 1853.

TRUMAN M. SMITH,

Justice of the Peace.

GG.

MINNESOTA TERRITORY, } ss.
Ramsey county.

Charles H. Oakes states, on his solemn oath, that he is a citizen of St. Paul, in the Territory aforesaid, where for better than a year he has been engaged in buying and selling exchange upon New York, St. Louis, and other distant cities; that he has had exhibited to him the copy of a check, dated St. Paul, December 13, 1852, No. 73, on the Merchant's Bank (N. Y.) for five hundred dollars, payable to Hugh Tyler, or order, and signed by Alex. Ramsey as drawer, (said check exhibited by Hon. Mr. Sweetser at the office of the Secretary of the Interior at Washington, as is alleged;) that *such paper is worth in Minnesota one and one-half per cent. premium*, and if the signatures are genuine, *would* readily bring that advance at this place, if transmitted here.

CHAS. H. OAKES.

Sworn to and subscribed before me this 18th day of February, 1853.

TRUMAN M. SMITH,
Justice of the Peace.

TERRITORY OF MINNESOTA, } ss.
Ramsey county.

I hereby certify that Truman M. Smith, whose name is subscribed to the foregoing affidavit of Peter Rouillard, Vetel Boger, Louis Anger, Charles H. Oakes, and William H. Forbes, and before whom said affidavits purport to have been made, was at the time each of said affidavits bear date a justice of the peace, duly elected and qualified to act as such; and that I am well acquainted with the handwriting of said justice, and believe each of the signatures to said affidavits purporting to be his are his genuine signatures.

In testimony whereof, I have hereunto set my hand and affixed the
 [SEAL] seal of the district court for the county of Ramsey, and Territory of Minnesota, this 26th day of February, A. D. 1853.

JAMES K. HUMPHREY,
Clerk of said Court.

HH.

WASHINGTON, April 3, 1852.

SIR: Having learned that an attempt is being made by certain interested parties to prejudice the minds of your honorable committee against some of the provisions contained in the treaties recently made with the Dakota or Sioux Indians, for portions of their land in Minne-

sota Territory, I have the honor to submit the following brief statement of facts connected with those treaties, for the entire correctness of which I can vouch, having been an eye witness to the whole of the proceedings connected therewith.

In both of the treaties referred to, it is stipulated that the Indians shall receive a portion of the purchase money in hand, or upon their establishment in their new homes, to meet their just engagements for their removal and subsistence. It is notorious to every man who has long resided in the Territory that those bands interested in the Trade with the Sioux treaty have, for many years, been supported by the regular licensed traders, at a very great loss and expense to the latter. The country being denuded of game, and these bands receiving no annuity from the government, the traders have been obliged to advance annually clothing for themselves and families, and guns and ammunition, and provisions, without which supplies these poor creatures would inevitably have perished.

The Indians, about four thousand in number, connected with the upper treaty well know that the resources of their country were entirely inadequate to enable them to pay for these credits in furs and skins, but always assured their traders that ample provision should be made to meet their demands whenever a treaty should be effected with the government. Accordingly, the upper bands, and a part of the lower bands did enter into an obligation to set aside, from the amount provided to be paid to them in hand, under the treaty, a sum large in amount, but very much short of what they justly owe. A part of the bands interested in the lower treaty have not signed any obligation. It is now alleged, I understand, that the chiefs and principal men of the upper bands signed the obligation without knowing its nature, with the supposition that they were affixing their names or marks to a duplicate copy of the treaty. This I solemnly assert to be entirely false. The amount to be allowed for the payment of debts was a subject of discussion among the Indians and their traders, and the missionaries, for days before the treaty was executed, and I was myself present very frequently when these discussions took place; and when the treaty was interpreted to the Indians, it was expressly explained by the government interpreter.

The chiefs and principal men all expressed their willingness to provide for the payment of their debts to the traders who were in the country, but were unwilling to pay the claims of others who no longer remained among them. Although, by such an arrangement, those of the former class could have secured themselves without difficulty, yet they were too upright to avail themselves of such an advantage over non-resident claimants. They, therefore, proposed that the Indians should obligate themselves to pay the sum designated, and allow the traders to divide it in a *pro rata* proportion among those who were really *bona fide* creditors of the said bands, which the chiefs assented to, and the division was made in a fair and equitable manner. The amount set aside by the Indians, did not suffice to pay more than one half of their just indebtedness, but the traders were agreed to accept it in full of all demands.

I beg to state what I know of the traders among these Indians. Some of them have spent twenty, thirty and even forty years in

trade, and all, with scarcely an exception, of those provided for in the obligation referred to, are deeply in debt and utterly impoverished, in consequence of their goods having been advanced, as I before stated, for the benefit of the miserable beings among whom they dwell.

Among them are old men with large families of children, who are entirely without the means of support, and whose sole dependence is upon the provision made for them by the Indians. So far were the chiefs from desiring to repudiate their obligations, that the very individuals who have signed the protest, offered subsequently, at Mendota, to go before the Indian agent and state that they wished it carried out in good faith; but that was not deemed necessary. The names of the half-breeds who were provided for in the same obligation, were designated by the chiefs in open council, in presence of a large number of Indians, and inserted according to their instructions.

I have thus stated to you, sir, what I know to be the truth in regard to the upper or Traverse des Sioux treaty. The sequel is yet to come. In the month of October last, three months nearly after the conclusion of that negotiation, a Mr. Sweetser arrived at St. Paul with an assortment of goods, and applied to the Indian agent at Fort Snelling for a license to trade with the Sioux, which was granted, and he proceeded to Traverse des Sioux. Although an utter stranger to the Sioux, never having previously visited their country, or had any dealings, directly or indirectly with them, yet having been connected in the trade with the Miamies, and other tribes in Indiana, (as I have been informed,) he was well acquainted with Indian character, and he forthwith commenced operations by endeavoring to produce dissatisfaction among the chiefs and principal men, with their old friends among the traders, and to induce them to repudiate their obligations. In the absence of those interested, and by making profuse expenditure of presents, together with an appeal to their cupidity, by stating, that if they would sign his papers they should receive a much larger sum of money than they otherwise would, a part of them were persuaded to sign a protest against their previous obligation; *also a power of attorney, granting to him, the said Sweetser, unlimited control over all their money to be received from the upper treaty*, if ratified, except the regular annuities.

And it is also stated that there was still a *third paper*, or agreement, which is not forthcoming here, and which provides that said Sweetser shall *share equally* with the other contracting party in what can be secured by him from the amount due to the traders and half-breeds; and armed with these documents, which the officers of the Indian department in Minnesota would not certify or have anything to do with, he now presents himself in this city, and hopes—with the aid of others who, I have reason to believe, to be contingently interested with him—to induce your honorable committee to further his views by some amendment to the treaty, which may prevent the rightful claimants, should the treaty be ratified, from receiving what is so justly their due. *A more sacred debt* was never incurred than is owing by the Indians to the traders; and, sir, *I trust your honorable committee will not permit any change in the phraseology of the treaties.*

The Indian Department has the authority, and it is made its duty by existing laws, to guard the recipients of annuities against imposition

and fraud, and the gentleman at its head will, no doubt, do his duty. As the treaty is worded, the government recognizes no individual claims upon the Indians, but very properly leaves the question settled between them and their creditors. I can assert, without contradiction, that many of those who are interested in the obligations given by the upper Sioux are men of the highest character for honesty and integrity, and who have proved themselves to be the true and warmest friends of the poor Indians, and who would scorn any attempt to take from them one cent which was not rightfully their own.

In conclusion, I beg leave to say that I have lived twenty-five years on the upper Mississippi river, during most of which time I have been interested in the trade with the Sioux Indians. I know them and their traders well, and I will do them the justice to say, that they have done more to arrest the introduction of liquor among their red brethren than all others combined. As I have before stated, their claims are eminently just, *while Sweetser's pretensions to interfere, are merely the result of a desire that he and his associates may appropriate the money which they have no claim whatever.* The same means and appliances on the part of any other stranger *now*, would induce the Indians to surrender Mr. Sweetser's power of attorney at once, and appoint some other man.

The traders in the country would experience little difficulty in procuring from the Indians a protest against the recognition by the government of Mr. Sweetser's papers; but regarding them as impostors and as fraudulent upon their very face, they have not considered it of sufficient importance to deserve any such notice at their hands, supposing that the Senate would pay no sort of attention to documents procured obviously for interested purposes.

For information respecting my character and standing in my native State, I beg leave to refer you to the accompanying letters from Hon. J. P. Walker and G. W. Jones, of the Senate, and Hon. J. D. Doty and Eastman, of the House of Representatives, most of whom have known me for many years.

I have the honor to be, very respectfully, your obedient servant

H. L. DOUSMAN

Hon. D. R. ATCHISON,

Chairman of the Committee on Indian Affairs, U. S. Senate.

HH, 2.

"Whereas, the Sec-see-toan and Wa-pay-toan bands of the Sisseton Dakota nation of Indians did, on the 23d of July, A. D. 1855, conclude a treaty with the government of the United States, acting through their accredited chiefs, headmen, and braves, with the Hon. L. S. Ramsey and Governor A. Ramsey, acting as commissioners on the part of the United States; and

"Whereas, it is provided in said treaty that the sum of \$275,000 be set apart to be paid to our said bands, after their removal to their homes on the Minnesota, and to be expended for the benefit of

bands, as provided for by said treaty; after signing said treaty aforesaid, we were asked by our traders, and did sign a paper, which we supposed at the time to be a copy of the treaty, or some other paper necessary to carrying out the agreement between our people and our Great Father, the President of the United States, in the sale of our lands; we have since learned, with surprise and astonishment, that we were deceived, misled, imposed upon, and wronged, by our said pretended friends and traders, in relation to the purport and meaning of said paper; that we have by said act agreed and bound ourselves and our people to pay to an assumed trader, a sum nearly or quite equal to \$220,000, out of the \$275,000 set apart in said treaty as aforesaid; and while we are not only willing and desirous to pay all our honest and proper debts, we most solemnly protest, that we never intended, by any act of ours, to set aside any such sum of money for the payment of assumed debts against our people, neither do we believe that it is possible for our people to owe one-fourth the amount thus assumed, to be due to our creditors aforesaid. The procuring from us a paper, authorizing the payment of any such sum, was a fraud and an outrage upon us and our bands, for whom we act. The payment of the same by our Great Father, the President of the United States, or by any one having the disbursement of our money, would be an act of great injustice to our people; therefore,

"Know all men by these presents, That we, the undersigned, chiefs, headmen, and braves, of the See-see-toan and Wah-pay-toan bands of the Sioux or Dacotah nation of Indians, being a majority of said chiefs, headmen, and braves, and as such fully competent to transact national business for the above named bands of Sioux or Dacotah nation of Indians, for the purpose of protecting our people against the payment of all improper, unjust, and fraudulent demands or claims, which may be assumed by virtue of said agreement aforesaid, or any other agreement with our said traders, or by any other pretext or agreement, have made, nominated, constituted and appointed, and by these presents do make, nominate, constitute, appoint, and confirm, Madison Sweetser our true and lawful attorney in fact, irrevocably, and with full power of substitution for us, and in our names and stead, as the constituted and proper authority of said bands and nation, to defend and protect our said bands and nation against the payment of any and all debts claimed against our bands or people, by virtue of any agreement heretofore made with us, until the same shall have been fully shown to be due and owing from our people to said claimants, by full and unquestionable proof of their justice, and by said claimants exhibiting to a proper constituted tribunal, which in its organization shall be to the satisfaction of our said attorney, or his delegate, or delegates, substitute, or substitutes, full and unquestionable original bills of purchase or invoices, and books of original entry, showing the basis upon which said claims are demanded, and claimed to be due and owing. Also, from any and all other demands which may be made against our said bands or nation, of whatsoever kind and nature, our said attorney, his substitutes, or delegates, for us and in our names and stead, as the constituted and proper authority to defend and protect our said bands and nation, and make proper settlements therewith. Also, to ask, demand, and receive of the said government of the United

States, and receipt for any and all sums of money that may be saved by our said attorney from the contracts with our said traders aforesaid, to our said bands or nation, or in shape of arrearages under any of our treaties with said government. Also, to negotiate with said government for us and in our behalf, in regard to any and all other matters that appertain to the general welfare of our said nation of Indians, or that may be, by our said attorney, deemed conducive to the interest of our said bands or nation, or the individuals composing the same. Our said attorney, or his substitutes, to have full power and authority from us, for ourselves, and our bands or nation, to do any and all lawful acts that may be by them deemed necessary to effect the premises as fully and completely as we might or could do were we personally present. Hereby ratifying and confirming any and all acts that our said attorney or his substitutes may do, by virtue hereof, and revoking and annulling any and all powers of attorney, or any other kind of authority, that we may have heretofore given (or any of us) to any person or persons, to act for us and in our behalf in and about the premises. It is expressly declared that nothing herein contained shall give our said attorney any power to act for us in anything connected with the disposition of our regular annuities.

“In testimony whereof, we, the undersigned chiefs of the said See-see-toan and Wapaytoan bands of the Sioux or Dakota nation of Indians, being a majority of said chiefs, headmen, and braves, and as such fully competent to transact national business for said bands and nation, now in full and open council, assembled at St. Peter’s agency, have hereunto set our hands and seals, as our material act and deed, this 6th day of December, A. D. 1851.”



COMMITTEE ROOM, U. S. SENATE,
March 14, 1853.

The committee met, and proceeded with the examination of M. Sweetser, esq.

I understand Governor Ramsey received from the government five hundred and ninety-three thousand dollars and fifty cents, for the Dakota Indians, under the treaty of Traverse des Sioux and Mendota, of July and August, 1851. I state, from information received, that Governor Ramsey exchanged the government currency received for bank paper and drafts on different banks in New York city, Harrisburg and Middletown, Pennsylvania; that he exchanged all of the gold he received from the government, excepting eighty or one hundred thousand dollars, before leaving the eastern cities for Minnesota. About five hundred thousand dollars were exchanged for this currency.

The annuities due the Indians were paid in gold.

The trust funds, or the greater part of them, were paid to the traders and half-breeds, and upon government contracts, in bank paper and drafts.

I do not know that any objection was made to receiving the paper money by those to whom it was payable, and I have understood that Governor Ramsey offered to pay to Mr. McKinstry, one of the govern-

ment contractors, either paper money or gold, at his option, and he paid to me \$1,000 due in gold.

During the councils prior to the payment at St. Peter's agency the chiefs of the Me-de-wah-kanton Indians at the council demanded of the governor the money due the chiefs in accordance with the fourth article of the treaty. A demand was made on several occasions in open council, and as often refused by Governor Ramsey. The governor stated to the Indians, on three several occasions, in my presence, that the treaty required that they should be removed to their homes on the Minnesota river before any portion of the money was paid; but on condition that they would leave in his hands the amount claimed by the traders to pay the debt claimed by them from the Indians, that he would soften down that provision of the treaty, and pay their annuities. And at the last council held at St. Peter's agency by the governor he told the chiefs, prior to the payment, that if they did not comply with the request or demands which he made that he would take the money back, and not pay their annuities.

I think Messrs. Hugh Tyler, C. D. Fillmore, A. J. Campbell, and others were present. I think Mr. Faribault was the interpreter on that occasion. This took place at the government house at St. Peter's.

Wabashaw, the principal chief, told him to take the money back, and they would go home, and that they would not comply with the conditions he made. After this the governor's councils were held at Mendota, at the trading post of P. Chouteau, jr., & Co. These councils were held with separate chiefs, generally at night, and during those times certain of the chiefs were known to be drunk, as I was informed, and verily believe.

After long delay, and frequent night councils at the trading post of P. Chouteau & Co.—H. S. Dousman, Hugh Tyler, C. D. Fillmore, and others were present—the signatures of the chiefs were obtained to the receipts for their trust fund.

In their councils the Indians expressed a desire to pay all their honest debts; to give to the half-breeds twenty thousand dollars, and a sum to be left in the hands of the government to remove and subsist them for one year after their removal. The twenty thousand dollars to the half-breeds were divided among their chiefs, and eight or ten prisoners of the Sioux, many of them children of the principal men, and one of them the son of a chief, were released from prison on the very evening or morning on which the signatures to the aforesaid receipts were obtained from the chiefs.

One of the chiefs told me that he had signed the receipts to obtain the liberty of his son, and that he had thus obtained his liberty; and I believe that the release of the prisoners and the payment of the money intended for the half-breeds was used as a bribe to obtain the signatures of the chiefs to the receipts aforesaid.

COMMITTEE ROOM, *March 15, 1853.*

The committee met pursuant to adjournment, and resumed the testimony of M. Sweetser, esq.

The Indians were called into council about the middle of November 1852. Governor Ramsey was present. The chiefs told him that they understood that the Indians at Mendota had been refused their money and they hoped that they would not be treated as their brethren at Mendota were. They then demanded of the governor their money (referring to the trust fund,) and in all their public councils expressed but one wish, and that was, that the money should be paid to themselves. Governor Ramsey answered, by stating to the chiefs that he had disposed of this fund already, and that he should not pay it to them.

Mr. Sibley, Hugh Tyler, James Campbell, Duncan Campbell, and others, I think, were present. Most of the persons present were interested in the disbursements of this fund. The chiefs reiterated their demands that the money should be paid to them, and not to their agents of the fund.

I heard all the principal chiefs who were present make the demand upon the governor for the money. Red Iron was the most active in making these demands; he was without any other apparent cause, distressed and broken of his chieftainship. He repeatedly refused to accept any receipts for money which was not to be paid to them.

During the time of these councils young men who had little influence with the tribe, and who their own people have since refused to recognize, were appointed to chieftaincy by him as chiefs, to the exclusion of the old chiefs. During these councils the interpreters employed or allowed by Governor Ramsey were persons connected in business with H. H. Sibley & Co., and other recipients of the money paid by the said Ramsey, or directly interested themselves. The signature on the receipt returned by Governor Ramsey, and now on file in the Department, for \$250,000, purporting to be the receipt of the See-see-toans and Wah-pay-toan chiefs, who are entitled to this fund, are not a majority of said chiefs, with the exception of one or two names, are young men unauthorized to transact national business.

In all their public councils the principal chiefs declared that the agreement purporting to be between themselves and the traders was a fraud, and that at the time of signing they supposed it to be a copy of the treaty. I have heard them make this declaration to the governor in council, and also heard him tell them that this or no other paper to the traders and others would be signed, but the money would be paid directly to them in accordance with the treaty.

This conversation of the governor to the Indians took place some time in the fall of 1851.

That Governor Ramsey told the See-see-toans and Wah-pay-toans at Traverse des Sioux that he was ready to pay their annuities; that they had disposed of their money, (meaning the hand money;) and that they had nothing to do now, or words to this effect.

The above testimony of M. Sweetser, esq., of Minnesota, was given under oath so far.

W. K. SEBASTIAN.

Chairman of the Committee on Indian Affairs.

CHARLES W. BORUP, sworn.

I have been connected in business with Mr. Sibley for three years past, both of us doing business in connection with the house of P. Chouteau, jr., & Co., of St. Louis. Mr. Sibley represented the interest of that house, also the interest of the old American fur company, and to a small degree himself, as a claimant under the Sioux treaty. He was absent the greater part of the time, and no other person, excepting myself and a brother of Mr. Sibley, represented the above firms. I had repeated conversations with Governor Ramsey on the subject of these claims, as it was a matter of deep interest from personal friendly feeling to Mr. Sibley, and from my business connection with the firm aforesaid, to have the claims paid, but I have no pecuniary interest in them except to a very small degree. Governor Ramsey always expressed to me a hope that he would have nothing to do with the payment of the claim, but that if he was obliged to do it, he would endeavor to do justice to all concerned, that he was determined to admit no claim not fairly substantiated.

I am also prepared to state, that there is no direct or indirect confederacy between Governor Ramsey, Messrs. Sibley, Dousman, and Steel, or any persons, that I know of, to the best of my knowledge.

I have personal knowledge of the fact of Governor Ramsey paying bank notes; he paid them to myself, but left to my option to take bank notes, gold, or drafts. I took notes and drafts because they were at one per cent. premium. I gave him nearly twenty thousand dollars in American gold for notes.

Governor Ramsey is proverbially kind among the Indians, the Sioux, Chippeways, and Winnebagoes—known as a kind and humane man—and to my certain knowledge gives general satisfaction. Governor Ramsey held his council at a house in Mendota, where the United States courts were held, where elections, and where both the treaties with the Indians were made. The reason for holding it at that house was because it is more convenient for the greater part of the Indians, and because the Indian agency is so small and inconvenient as to oblige them to hold councils, if held there, in the open air.

I was offered, as the representative of the above claimants, by Mr. Sweetser, through Mr. Dousman, that if I would pay them thirty thousand dollars, to be divided among three of them Sweetser being one of them, he would agree to withdraw all opposition to the payment of the claims, &c., &c.

Mr. Sibley, representing the above firms, did not receive more than forty or fifty per cent. of the claims justly due them.

Relative to Indians being drunk at any council held by Governor Ramsey, I would state, that I have lived for nearly twenty-seven years among them, Chippeways, Winnebagoes, and Sioux, that I have seen very little drunkenness among the Sioux, much less than among their white neighbors. That as far as Mr. Sibley is concerned, he has always taken a prominent stand in advocating the cause of temperance among the Indians; that to his influence mainly is to be attributed, that the Sioux are as sober as they are. That Governor Ramsey, also, on all occasions, has endeavored to promote the cause of temperance

among them, and that it would be a direct insult to either of those gentlemen, to think for a moment they would, directly or indirectly, have anything to do with Indians where liquor was used, and, to the best of my knowledge, no Indian chief or brave has been permitted to take an active part in any council, when they were in liquor.

CHARLES W. BORUP.

JOSEPH SIRE, of St. Louis, Missouri, sworn.

I will state that I was connected with Mr. Sibley since 1839. The house of P. Chouteau, jr., & Co., of which I am a partner, has been supplying Mr. Sibley with goods since. The goods supplied to Mr. Sibley have always been of the best kind of English goods, such as blankets, cloths, &c., and also a large quantity of provisions, suitable to the Indians. Since 1842, by the inventories and settlements of books, rendered yearly by Mr. Sibley to P. Chouteau, jr., & Co., the business showed a loss of about ten thousand dollars per year, and in some instances, as much as thirty thousand.

These deficiencies were caused by the immense quantity of goods given to the Indians on credit, who were unable to pay for them, and who could not have subsisted without them. The house of P. Chouteau, jr., & Co., by the advice and with the influence of Mr. Sibley, continued to furnish supplies to those Indians on credit, not only because they expected to be paid when a treaty would be made, but also through a sense of humanity.

Although Mr. Sibley seems to have received a large sum of money, I know, and can prove at any time, that Mr. Sibley's business with the Sioux Indians still shows a large deficiency.

I have known Governor Ramsey well, since he has been Governor of Minnesota Territory, and in the winter of 1850 to 1851. I have assisted him in holding council with the Sioux Indians, as I understand their language, and in the course of said council found that the Governor gave the Indians general satisfaction, and that the Indians were willing to listen to his words.

JOSEPH A. SIRE.

COMMITTEE ROOM, *March 25, 1853.*

The Committee met pursuant to adjournment, Hugh Tyler, esquire, who duly affirmed as follows:

I left Washington city with Governor Ramsey in October, 1852, when he drew from the government the money for the Sioux Indians. Governor Ramsey did in the city of New York deposite the whole, or a portion of the funds obtained from the government.

I understand from Governor Ramsey that Mr. Whittlesey told him he had a right to deposite the money and check for it; and I suggested to him that it would be the safest and most convenient mode of disbursing it. The difficulties and expense in transporting the specie to

Minnesota, and the known fact that a portion of this money was to be received by the creditors whom the Indians have designated to receive it, rendered it, he considered, the most proper mode of disbursement.

I told Governor Ramsey that he had better deposite all the money, except the annuities in New York, and check for it as he wished to pay it out. His reply was that he wished to take as much money into the Territory as he could, that the people would be better satisfied if money were brought for circulation. I then said, for convenience you might take a portion of it in New York bills, and that those I represented would as soon, if not rather have them than gold; his desire seemed to be to discharge his official duty properly, and at the same time satisfy the people of the Territory without reference to these claims of traders.

I was the attorney of the claimants and was deputed by them to look to their interest, and as their attorney, I told Governor Ramsey that the claimants I represented would as soon, if not rather receive in payment checks on New York, believing that those checks were worth more to the recipients than the gold in Minnesota. I also advised him as the attorney, inasmuch as many of the claimants would receive comparatively small amounts, that it would be better to take with him a certain amount of bank paper, which I told him the claimants would just as soon have as gold.

Governor Ramsey told me what disposition he intended to make of the money, nor did I ever, as the attorney of said claimants, offer him any inducements to disburse the money in any particular manner. I always took it for granted, as did every one else I conversed with, that the money was to be paid in the manner that Governor Ramsey paid it.

Governor Ramsey took with him more gold than was sufficient to pay the Indians the annuities. After I got to Minnesota in company with Governor Ramsay, I was informed by the claimants that they had set apart ten per cent. for the purpose of defraying the expenses they had been subjected to.

I was present I think, at all the councils held by Governor Ramsey after he returned to Minnesota with the money, and I staid at Mendota with H. H. Sibley the most of the time. There never was, to my knowledge, a council held there with the Indians in the night, nor at any other time, except at the request of a large portion of the Indians; nor did I ever see but one drunken Indian there, who it is said came up from St. Paul one night and stopped at Mr. Sibley's office. In all these councils I never heard Governor Ramsey tell the Indians that, unless they paid the traders, they should not have their money. I did hear him say, that as honest men, it was proper that they should pay their honest debts.

When he spoke to them in reference to their obligations under the treaties to remove before they could receive their money, he said to them that inasmuch as the Senate had amended their treaties, and as it was late in the season and unprepared to remove, he thought he was justified in extending the time of removal until the spring, and he never did to my knowledge make the payment of their debts a condition of them being suffered to remain.

Not one of the claimants objected to receiving the drafts and bank paper who were not accommodated with gold. All the claim-

ants preferred it, and the half-breeds were asked, without exception, which they preferred. Business men who have received gold considered it an accommodation to receive drafts, or bank paper, nor was any one threatened by me that unless he paid me the per centage he would not receive his money. It was a voluntary matter on their part the amount to be paid them for expenses.

Questioned by D. A. Robertson.

I was the attorney for the claimants generally ; I was employed by Messrs. Sibley, Dousman, and the other claimants, before the treaty was ratified. There was no written contract between us, but there was a general understanding between myself and the claimants that I was to have a per centage on what amount they would receive from the Indians.

The claimants got together and made a calculation of the expenses they had incurred in getting the Indians to ratify the Senate amendments for payment of attorney, &c. It amounted to over fifteen per cent.

I received from Governor Ramsey all the money paid to the claimants, amounting to \$370,000, after the annuities had been paid: the claimants anxious to receive their money requested me to go to St. Paul for it. Governor Ramsey paid me the money on their order and receipt.

Governor Ramsey never received any of this money.

I was at Traverse des Sioux when the treaty was made ; I was sent up there by Luke Lea, Commissioner of Indian Affairs, in an official capacity. I will also state that the Indians would not make a treaty unless the commissioner would set apart a sum of money for the payment of their debts, saying the traders had been kind to them, and furnished them with the necessaries of life.

It seemed to be perfectly understood by nearly all who were present at the time the Indians made a distribution of their money among their creditors and half-breeds, that they understood the contents of the paper they were signing.

Questioned by Mr. Sweetser.

Question. Did you or did you not arrive at St. Paul's in the night, and left the same night with Gov. Ramsey after the money ?

Answer. I did.

Question. Is Mr. Whittlesey an officer of the government ? If so, what office does he hold ?

Answer. First Comptroller of the Treasury

Question. Did you see an official letter from Mr. Whittlesey to Gov. Ramsey, informing him that the money which he received to be paid to the Indians in Minnesota, might be disposed by him and checked for an occasion might require ?

Answer. I saw what purported to be a copy of a letter addressed to Gov. Ramsey by Mr. Whittlesey. On reflection, I cannot say whether the letter referred to this money or to the money appropriated to pay

the Minnesota Indians, or whether it referred to other moneys which he had previously received. I saw the letter this last winter, but do not recollect its date.

Question. Did you hear Mr. Whittlesey tell Gov. Ramsey that he had a right to deposite and check for the money?

Answer. I did.

Question. By what claimants were you employed?

Answer. By Mr. Sibley, Mr. Dousman, Mr. Faribault, and Mr. Bay, and others.

Question. At what time did you become the attorney for the claimants?

Answer. Some time before the treaties were ratified.

Question. Were you the attorney of any of the traders except Sibley, Dousman, and Faribault, other than by an understanding between yourself and the above-named claimants?

Answer. Mr. Sibley stated to me that the claimants wanted me to assist them in getting their claims.

Question. How much of the \$593,000 did Governor Ramsey take to the Territory in bank paper or drafts, or leave on deposite in banks in the city of New York or other places?

Answer. I do not recollect how much money the government turned over to him.

Question. Was you present when Governor Ramsey deposited the Sioux money in the bank or banks in New York?

Answer. I was not present.

Question. Did Governor Ramsey tell you, or did you learn from any other source, how much was paid said Ramsey by the banks for the exchanges?

Answer. I saw a letter from the president or cashier of the bank to Mr. Sibley, stating that he got nothing.

Question. Did not Governor Ramsey, to your knowledge, before he reached the Territory with the money, say that it should be paid to the claimants and not to the Indians?

Answer. I do not recollect that Governor Ramsey told me, or any one in my presence, how he intended to pay the money.

Question. Do you or do you not know that Governor Ramsey was in the habit of holding councils or talks with chiefs at night on the subject of their business at Mendota, subsequent to the councils being held at St. Peter's agency?

Answer. I think he was not.

The testimony of H. Tyler, esq., was given under oath so far.

WM. K. SEBASTIAN,
Chairman Committee on Indian Affairs.

APRIL 6, 1853.

OFFICE OF INDIAN AFFAIRS,
April 20, 1853.

I, George W. Manypenny, Commissioner of Indian Affairs, do hereby certify that the foregoing are correct copies of the originals on file in this office.

GEO. W. MANYPENNY,
Commissioner.

I, Robert McClelland, Secretary of the Department of the Interior, do hereby certify that George W. Manypenny, whose signature is annexed to the foregoing certificate, is now, and was at the time of signing the same, Commissioner of Indian Affairs, and that full faith and credit are due to his official acts as such.

In testimony whereof I have hereunto set my hand and caused the [L. s.] seal of the Department of the Interior to be affixed, this 20th day of April, 1853.

ROBERT McCLELLAND,
Secretary.

In the matter of the investigation of the charges preferred against the Hon. Alexander Ramsey, late governor and superintendent of Indian affairs of Minnesota:

In 1851, Governor Ramsey and Luke Lea, Commissioner of Indian Affairs, were commissioned to treat with the Sioux or Dakota Indians, for the cession of a part of their territory lying within the boundaries of Minnesota. The treaties of Mendota and Traverse des Sioux were negotiated; a large and valuable body of lands was ceded to the United States; and by the provisions of those treaties some \$495,000 was to be paid to the chiefs of said bands, to enable them to settle their affairs, meet their present just engagements, &c., &c., in such manner as they thereafter should, in open council, request.

The treaty of Traverse des Sioux was signed on the 23d day of July, 1851, by the chiefs, head men, and braves, of the Seeseetoan and Wahpatoan bands. On the same day, and in the same council, immediately after having signed the treaty, these same chiefs, head men, and braves, executed a paper, by which they made provision for the payment of their creditors. To this paper was subsequently attached, by the direction of the Indians, a schedule of the names and amounts due to their several creditors and half-breeds.

Some months subsequently to this, on the 6th of December, 1851, a small portion of the chiefs, head men, and braves, consisting of but *three chiefs*, and numbering but twenty-two in all, were induced to execute to Mr. Madison Sweetser, one of the gentlemen who prefer these charges, a power of attorney, by which it is sought to divert the moneys, already appropriated for the payment of their debts, from its legitimate channel. There is an affidavit attached to this power of

attorney, in which it is stated that the Indians executing that power of attorney constitute a majority of the chiefs, head men, and braves. That statement is untrue.

The treaties were forwarded to Washington, amended and ratified by the Senate, and remitted to Governor Ramsey, to obtain the assent of the Indians to the amendments. The chiefs, head men, and braves, of the Secseetoan and Wahpatoan bands, parties to the treaty of Traverse des Sioux, assembled at St. Paul on the 8th day of September, 1852, and there, in the presence of both Governor Ramsey and Agent McLean, ratified and confirmed the amendments. The same parties, at the same time, executed to Governor Ramsey a power of attorney, authorizing and empowering him, in their names, to draw, receipt for, and appropriate, the \$275,000 named in the treaty of Traverse des Sioux, in accordance with and for the purpose of carrying out the true and equitable intent of the 4th article of that treaty. Governor Ramsey, at their earnest solicitation, accepted the trust. He proceeded to Washington; was there intrusted with the whole fund due under both treaties; was paid in United States treasury drafts; carried them with him to New-York, and there deposited them in the "Merchants' Bank," and "Bank of Commerce." Upon these deposits he checked for a sufficient amount of gold to pay the annuities to the Indians, and meet any other demands upon the fund when gold was preferred. He likewise drew upon those deposits for a small amount of bank paper, which he brought with him to the Territory. This paper was on a solvent bank, at *par* in New-York, and, in consequence of its convenience, preferable to coin in Minnesota. The balance of the fund he left on deposit, subject to his drafts, and payable in gold. The drafts were worth a premium in Minnesota at the time of the payment. Upon his return to Minnesota, Governor Ramsey assembled the Indians, obtained their re-direction of the manner in which they desired their money to be disbursed, and paid it accordingly, taking his power of attorney of the 8th of September, 1852, in connection with what is commonly called the "Traders' Paper," as his guide. It may as well be stated that this power of attorney revoked all other and former powers of attorney relative to the disposition of their money, and had particular reference to the one executed by Mr. Sweetser.

In regard to the payment of the Medawakantoans, it was made upon the written direction of the chiefs in open council.

These are the facts upon which are based the charges preferred against Alexander Ramsey, late governor and superintendent of Indian affairs of Minnesota, by Madison Sweetser, a trader among the upper Sioux, and D. A. Robertson, the then editor of the "Minnesota Democrat," a newspaper published in St. Paul in the early part of the year 1851.

As soon as Governor Ramsey became aware that the propriety of his conduct, in the late Sioux payment, had been made the subject of libellous and malignant comment in some of the least scrupulous newspapers of the country, and had been copied into others, the editors of which knew not the character of the sheets they were accrediting, he promptly asked, through the Indian Office at Washington, and also through the delegate in Congress from the Territory, that his conduct

sumed would have been limited to less than an equal number of weeks; the truth would have been vindicated; the door would have been closed against the floods of perjury that marked much of the testimony on the part of the government; ample opportunity would have been given to collect the truth; justice would have been done to the government; and less injustice and wrong to Governor Ramsey. But such, unfortunately for him, was not the case. The investigation was protracted beyond all reasonable limits; his time being wasted, and his means expended in defraying the expenses entailed upon him by its protraction.

None of these things are apparent on the record. Peremptory refusals were given to requests, that objections to the admission of testimony should be noted. Offers of testimony and interrogations made and put by the defence were passed unnoticed. Here was manifest wrong to Governor Ramsey; for the presumption will be, in the absence of all evidence to the contrary, that all the proof offered was received. Such, however, is not the case. The most material and conclusive proof, in justification of Governor Ramsey's conduct, was excluded; and when they did exclude, every rule of right and justice demanded that the fact of such exclusion should appear on the record.

But the investigation has closed; the testimony, such as it is, has been transmitted to Washington; and, we presume, by that Governor Ramsey will be bound, unless the government will extend to him the privilege of showing *ex parte* what was not permitted to be shown before the commissioners. Justice demands this, and we hope her demands may not be denied, even for the sake of the government itself.

But to proceed to the consideration of the charges. They are in themselves an anomaly. They are vague, indefinite, and confused. They are followed by no specifications. Neither time, place, circumstance, or person, is named to fix the charge with any certainty to any particular act or series of acts. They are made without any system or regularity, and generally of such a character as no officer of the American government was ever before called upon to answer. Charges, involving either malfeasance or fraud on the part of a government officer, have always been required to contain specifications, which set out with precision, minuteness and exactitude, each particular act, with date, place, circumstance, and name, which is intended to be proved to support or sustain either of the general charges. These specifications were to be made with particularity and perspicuity; and the slightest material variance between the proof and the specification, would cause its exclusion. The object and justness of this rule is manifest. The party charged must be put upon his guard. He must be enabled to prepare his defence, and have in attendance his witnesses, to rebut or disprove, if necessary, what is alleged against him. Without specifications, how can he be enabled to do this? Surprise would meet him at every step; but it would be too late to remedy the wrong when he was already upon his trial. Justice to the party charged requires this in every case; but most particularly does she demand it, when the charges assail the personal reputation and personal liberty of an individual. A court of inquiry would not have for a moment entertained any single charge in the category preferred against Governor

Ramsey, and such a tribunal more nearly assimilates to an investigation of this character than any other.

But notwithstanding the total irregularity and unfitness of charges, anxious to have his conduct put to the test of the most searching scrutiny, conscious of the justness and integrity of his motives in every act he did, and desirous for an opportunity to place himself before his government and the country, Governor Ramsey waived the irregularities in the charges, responded to them, vague as they were, and entered upon his defence in the confident hope that the whole transaction which gave rise to these charges, from its incipency to its termination, would be investigated. In this he was disappointed, and the point which he considered most material was entirely excluded.

The charges of Mr. Sweetser and Mr. Robertson, taken conjointly, resolve themselves into but two points :

The first one is, that the Indians demanded of Governor Ramsey payment of the money received by him, and that he refused to pay it, but paid it out to a few favorites, with whom he was confederating.

The second is, that he deposited in bank the national currency in gold received by him, and exchanged it for bank paper and drafts, which bank paper and drafts he paid out to the creditors of the United States, in violation of law.

However, for the sake of perspicuity, we will take up and consider separately each charge, unless there may be some instances where two or more may be treated conjointly without confusion.

The first charge of Mr. Sweetser is :

“That Governor Ramsey confederated with H. H. Sibley, Dousman, Hugh Tyler, F. Steel, and others, to absorb the whole of the money named to favorites, to the exclusion of meritorious creditors.”

In nearly three hundred and fifty pages of testimony taken from the commissioners, there is not one syllable of proof to sustain this charge. In that whole mass of matter there is not a circumstance, however remote, from which can be inferred even a suspicion of confederacy between these parties or either of them.

Notwithstanding, however, there is no proof to sustain this charge, Governor Ramsey was unwilling to permit it to remain uncontradicted upon the record. Mr. Sibley, Mr. Dousman, and Mr. Steel are brought upon the witness stand. The question is put to them in a direct and positive form. There could be no equivocation in the answer. What was it? A uniform and indignant negative. The same question was put to Mr. Tyler before the Senate committee in Washington, and his answer corresponds with that given by the others, and falsehood is fixed upon the charge.

The next charge, and somewhat of the same character, is the charge against Mr. Robertson :

“That he, (said Ramsey,) with H. H. Sibley, Dr. C. W. Borup, J. C. Brum, C. D. Fillmore, and others, have co-operated to deprive the Indians of their rights under the late treaty; that by their machinations the money due said Indians was disbursed in violation of law, the rights of the Indians, and treaty stipulation.”

This charge would seem to refer to the treaty of Mendota, as it was the last one negotiated. It is as barren of testimony to support it

one just considered. There is not a syllable of testimony that these parties, or any of them, either conjointly or separately, ever resorted to any fraud, trick, design, or any other improper means, to deprive the Dakota Indians, under any late treaty, of either their rights or their money. No one has testified to anything of the kind; nor can any evidence be found on the record. Two of the gentlemen charged have been upon the stand. Both deny that they ever either co-operated or confederated with Governor Ramsey, or any one else, to deprive the Dakota Indians of their rights under the late treaty or any other treaty, and that they were parties to no machinations by which the money due said Indians was distributed in violation of law.

But, though this charge does really refer to but one treaty, we presume it may be *intended* to cover both; and there is no desire on the part of Governor Ramsey to screen himself behind informalities. He is just as ready to answer for his conduct under the one as under the other. We are left to conjecture entirely in regard to the character of the "machinations" charged against these gentlemen. The charges afford us no guide, and the evidence is of the same character.

It may be pretended, however, that the authority upon which the money was distributed, was obtained by means of trick; as the chiefs of the *Scesetean* and *Wahpaytoan* bands generally testify that they signed the "Traders' Paper," believing it to be a copy of the treaty. These witnesses have been convicted of testifying falsely out of their own mouths. What is their testimony? The "*Orphan*" admits that he signed a paper for their traders at the same time he signed the treaty; but it was never explained to him. Yet this same man addresses the commissioners in reference to the provision they had just made for their traders, before he leaves the council in which the paper was signed. "*Sleepy Eyes*" denies signing it at all, when he did sign it, and a few moments afterwards addressed the commissioners also in regard to it. *Wah-mak-soon-tay* admits that he signed it, and that he was always willing to pay the traders. The rest of the chiefs either deny having signed, or if they did, that it was never explained to them. They likewise testify with the same freedom, and without any hesitation, that they signed but two papers in that council, and that the treaty was not explained to them in the council where they signed it. This shows the amount of reliance that can be placed upon Indian testimony. That the one part of their testimony is untrue, none will deny; and it being untrue when they had no interest in saying the treaty had not been explained or interpreted, how much more likely is the other to be false, when they have been taught to believe that it is to their interest to discredit and destroy the validity of the "Traders' Paper." But apart from inference and probabilities, however strong, there is positive and convincing proof that it was read and explained to them fully before they signed it, and but a very short period, too, before it was signed.

It is not pretended that this paper was explained to the Indians in the council where it was signed. To do so was impracticable. But it is pretended and asserted that it was not only explained to them, but fully understood by them before they entered the council in which it was executed; and further, that they had directed the traders to distribute the sum of \$210,000 among themselves, and that they would

distribute the \$40,000 among their half-breed relatives; and that list of names and amounts was to be the guide for distribution. proof sustains, in every particular, this assertion.

But before we refer to the positive testimony upon these points will not be amiss to direct attention to the conclusive and convincing evidence furnished by their own conduct and actions, both in council where the paper was signed and immediately subsequent. It is the testimony of every witness called, who was in the council where the treaty and "Traders' Paper" were signed, that both "Sagoyewew" and the "Orphan" addressed the commissioners in reference to the provision that they had just made, by which they had wiped the debts due to their traders.

In addition to this, we find the whole of these chiefs in council immediately after they left the commissioner's lodge, making distribution of the \$40,000 among their half-breed relatives, as contemplated in that paper. They sent for Mr. Sibley to take down the list of the individuals whom they may name. The chiefs name over their relatives and their names are written down. The list is completed; and the following morning they are again found in the lodge, where Mr. McLean is copying the list and attaching it to the paper. They show by their conduct on that occasion, also, that they are not only familiar, but satisfied, and even gratified with what they had done. *Red Iron* himself states that he made provision for the missionaries. That provision was made upon the traders' list, and his admission of having made provision for them proves that he was familiar with the objects of the papers. He was likewise at the distribution of the half-breed money and named the brothers Provencelle as participants in that distribution. These circumstances, unsupported by any other evidence, are conclusive of their perfect knowledge of that paper. It is not denied that these circumstances did occur in the order and manner here stated. The Indians not only spoke in council, but met to distribute this money unsolicited and unprompted. They even exhibited an anxiety to do so and were active in collecting and inviting the half-breeds to the council. These circumstances are beyond contradiction, and fix the fact *scienter* beyond all question. This is one of those cases in which circumstantial evidence is stronger than direct proof. The only means of arriving at a man's knowledge of any circumstance, is by his acts. Here the acts of the Indians were pointed and conclusive.

To corroborate the testimony of the chiefs, the Rev. Mr. Williamson is called. He says he is an attesting witness to the signatures to the "Traders' Paper," and that he witnessed it under the impression that it was a copy of the treaty; that he subsequently learned it was a paper for the benefit of the traders and half-breeds; he went to the council where it was, saw that it was as represented, and inquired if it had been explained to the Indians. He was answered by Mr. Sibley that it had been fully explained.

In the commissioners' notes of testimony, Mr. Williamson is made to say that "the Traders' Paper was not explained at any time." This is an error in the commissioners' notes. His attention was directed to the council, in which the treaty and this paper were signed; and the answer to the question was, "it was not explained to them at any

in that council." This is what he did say; and it is to be regretted that the answers of witnesses were not taken down *fully*, and in their own language. This was not always done by the commissioners, as is apparent from the *form* in which many of the answers are written. Thus the impression left upon the record is often entirely different to what witness intended. But the answer here attributed to Mr. Williamson would make his testimony inconsistent; for he says it was well understood upon the treaty ground, by every one present, that some arrangement was to be made for the payment of the traders, and that without their aid and assistance no treaty could have been made.

Mr. Williamson's corroborative testimony amounts to nothing. He says he witnessed the signing of the paper without knowing what it was, and under the impression he was witnessing a copy of the treaty. How does this corroborate the falsehoods of the chiefs? Not at all. He merely declares his ignorance of the nature of a paper, which, as a mere subscribing witness, he was not presumed to know.

In addition to these circumstances, conclusive and overwhelming in themselves, we have the direct, positive, and unimpeachable testimony of the Hon. H. H. Sibley, the Rev. Mr. Riggs, Mr. McLeod, Mr. Brown, Dr. Foster, Mr. Alex. Farribault, and others, that this paper was fully and fairly explained to them before they went into the council to sign the treaty.

Mr. Sibley says, to his own knowledge, it was explained to most of the chiefs and principal men, and he has reason to believe it was fully understood by all before they went into the commissioners lodge to sign it, and that it had been a subject of general conversation and discussion among the traders and Indians for some time previous to the treaty, and generally understood that some provision was to be made for the payment of their debts.

Mr. McLeod not only corroborates Mr. Sibley, but he goes further, and fixes the re-affirmation of the paper on the morning after it had been signed, and after the schedule and half-breed list was made out. He says that he knows that all the upper chiefs and their principal men knew the contents of the "Traders' Paper" before it was signed. The chiefs join him, on the ensuing morning, while he is engaged in his tent copying the schedule and half-breed list upon the same sheet with the "Traders' Paper." They wish to know what he is writing; he informs them; and they suggest another name for the half-breed list, which he places upon it. They then inquire of him what the traders had done in regard to the distribution of their money; he informs, and they tell him that the traders are fools for allowing any part of the sum to those not residing in the country; that they should have kept it all among themselves, and then express their satisfaction and gratification at having paid their traders. They, subsequently to this, frequently referred to the provision they had made to pay their debts, and leave the question clear and satisfactory that they did understand the provisions of that paper.

Next comes Mr. *Brown*, a gentleman who had also lived and traded among them for nearly a quarter of a century. He knew them and their habits, and testifies with a clearness that places this matter beyond doubt. He says he held the pen for them to touch, and that before

they did touch that pen, the paper had been fully explained to them that it had been explained to them as lately as the morning of the day on which it was signed in Tacata's lodge; that all or most of the chiefs and principal men were present; that the explanation took place no half an hour before they signed it; and that they went from the council, in which it was explained, directly into the council where it was signed.

Mr. *Farribault* and Mr. *Dousman* both heard the contents to the Indians in the lodge designated by Mr. Brown. The Rev. Mr. *Riggs* and Dr. *Foster* also testify to the fact of its being explained, as well as others whose names are not mentioned, and who stated the same thing incidentally. The facts are clear, and fix the character of Indian testimony—a subject upon which we will make some comment hereafter. There are a thousand things corroborative of these facts: The fact that a large amount of indebtedness was admitted to be due to the traders; that a commutation was made, and an agreement between the traders and Indians that \$210,000 should be received in full satisfaction of all present indebtedness; the many circumstances already referred to; the frequent references, after the treaty, that they had wiped out their traders' debts, and their acquiescence for so long a period—it is in evidence that some of them spoke of it to Mr. Williamson on the same day. It is an Indian characteristic to complain; and had they been tricked or imposed upon, their grievance would have been made known to the commissioners on the spot. But they remained quiet and satisfied until the early part of December following, and would have continued to do so, had not evil advisers and designing men gone among them. Their first complaint was made on the 8th day of December, 1851. On the 6th of the same month, these same complainants, *three chiefs and eighteen braves and young men*, were introduced to execute to Mr. Sweetser, the gentleman who prefers a part of the charges against Gov. Ramsey, a power of attorney, giving him the control of their money. Does this not explain the whole difficulty? Mr. Sweetser brings them from their homes to St. Paul; he takes them to the agent; they complain to him that they have suffered grievous wrongs. Mr. Sweetser takes them back to St. Paul; they go to see Gov. Ramsey, and complain to him. Mr. Sweetser had just obtained from them a most extraordinary written document. The paper constituted and appointed him their national and tribal guardian; superseded the duties of the superintendent, and gave him unlimited control over all their affairs, except their annuities, even to making treaties and collecting moneys yet unappropriated. What was the cause of the complaints made by the Indians? This needs no comment.

Perhaps we have gone out of the way to discuss the manner of obtaining the Traders' Paper at all, as there is no evidence that Governor Ramsey had anything whatever to do with it, either directly or indirectly, or that he ever knew of its existence until his attention was called to it by Mr. Hugh Tyler, the agent and attorney for the traders and half-breeds, when in Washington some eighteen months afterwards drawing the Sioux money.

Mr. Sweetser's seventh charge alleges:

“That said Ramsey was guilty of improper conduct in not holdi

his councils with the Medaywakantoan Indians at the council-house of the government, and with holding the same at the trading (post) house of persons with whom he was confederating, to overreach them by means of menace and other influences, which enabled him to effect his purposes aforesaid; that said chiefs were kept drunk by the use of intoxicating liquors during said council."

This charge seemed to have been abandoned by the commissioners after the first two or three efforts to sustain a part of it had signally failed. It is true, *John Campbell*, an uneducated half-breed youth, who cannot read, and who speaks and understands the English language so indifferently as to be almost unintelligible, testifies that he went into Mr. Sibley's office one night and there saw "Bad Hail" and "Little Six's brother" drunk; and that liquor was given to them in the office, though this is an unimportant fact, as it was not in council nor when Governor Ramsey was present; yet the youth admits on his cross-examination that no liquor was given to them, and that he saw none there. It is probable these Indians were drunk on this occasion, but neither of them are chiefs; and upon hearing of the circumstance, Mr. Sibley was prompt in instituting inquiry to discover the offender, but after the most vigilant investigation, was unable to discover who he was or whence the liquor was obtained.

The removal was made to Mendota from the agency, because of the more suitable room at the former place in which to hold councils, and at the request of the Indians, most of whom live upon the Mendota side of the Minnesota river. But one council, however, was held there, and it was the usual place for holding general councils, as appears from the testimony of several witnesses, as well as from the treaty itself.

The charge of "menace" and "other influences to overreach them," is entirely unsustained. There was not an attempt made nor a question asked, to elicit evidence under this charge. It was abandoned. But the defence did not abandon it; and what was the testimony of witnesses whose attention was directed to it? All the witnesses called by Governor Ramsey testify that his conduct was uniformly kind and indulgent towards the Indians. Most of the witnesses were in attendance both at the treaties and the payment; three of them were his interpreters, and all unhesitatingly swear that he never, in any council in which they were present, used any menace or other improper influence to control and govern the Indians; nor is there a single instance of cruelty, harshness, or menace, that can be adduced during his whole official intercourse with these people.

The fourth charge of Mr. Sweetser alleges:

"That Governor Ramsey, in connection with H. M. Rice and others, is charged with having assembled the upper Indians at Traverse des Sioux, and there attempting to procure from the Indians written authority to control their money arising under the treaties."

It is scarcely necessary to say one word in reply to this charge. The allegation is, that an *attempt* was made to procure this authority. Even if it were so, it constitutes no offence, nor is it evidence of improper conduct. But the charge is untrue, and there is not a particle of evidence that ever such an attempt was made either by Mr. Rice or any one else.

Mr. Sweetser's fifth charge:

"Governor Ramsey with having attempted to obtain from the United States treasury the money due the Sioux Indians, upon a power of attorney which he admitted to be void, and which was obtained from the Indians by fraud."

This is another charge of "attempting" to do a thing which it is alleged ever was consummated, and therefore would amount to nothing if true. But it is totally and unqualifiedly false in every particular.

No power of attorney was ever used by Governor Ramsey to draw money out of the treasury of the United States, which he either admitted to be void, or which had been obtained by fraud; and this is not a particle of testimony to sustain any one of the distinct allegations in the charge, either that Governor Ramsey ever attempted to draw money from the treasury upon a power of attorney which he admitted to be void, or that he ever admitted any power of attorney executed by the Sioux Indians to him to be void, or that he ever attempted to use a power of attorney obtained from the Sioux Indians by fraud in any manner or for any purpose whatever, or that any such power of attorney was ever in existence; we must conclude that this was a shot, a blow struck at random, done for the purpose of making a pretension and to give a show of importance to other charges equally untrue and groundless.

Mr. Sweetser's sixth charge is:

"Said Ramsey stands charged with cruel and oppressive conduct towards the chiefs, who were the authorized agents of said bands, and the substitution of unauthorized persons as chiefs and brave men, and the procurement of receipts from such persons, which he is now attempting to palm off upon the government as vouchers in the settlement of his accounts with the Indian bureau."

This is another of those vague and general charges which it is impossible to answer with any special negative proof; and the only conceivable reason why those charges were so made, was to avoid the apparent falsehood that special and distinct charges would have been prohibited. We can see none other, nor do we believe that stupidity could have formed the whole series with such uniform vagueness. There was a motive. The motive was the one suggested. It could have been no other. Which the "said bands" are, that this charge intended to indicate, it is beyond our power to comprehend, nor does the evidence cast the least ray of light upon the question. Therefore, in order effectually to meet and exhibit the utter falsehood contained in the charge, we must embrace in its consideration the whole four distinct tribes or divisions of the Dakota Indians, parties to the treaty of 1851, viz: The Medaywakantoans, the Wahpaykootays, the Sissetons, and the Wahpaytoans, which consist of at least twenty different and separate bands. Nor are we certain, even then, that we are answering the charge, for it does not say that they were bands of Dakotas or Sioux. If, however, the charge has reference to either one of the four great divisions of the Dakotas, we pronounce it to be false in part and in whole, in letter and in purport, totally and unqualifiedly false; and that if he who made it had sufficient knowledge of Governor Ramsey's conduct in his official intercourse with those Indians to warrant him in preferring charges, he knew it to be false when he made it.

We now simply ask, where is there a single iota of evidence to sustain any part of this charge? We assert that there is none, and we challenge its production.

It is the evidence of every witness that was called, either by the government or by Gov. Ramsey, that his conduct towards the Indians was always mild and lenient, and that they never knew it otherwise in a single instance.

We presume, however, that this charge of oppression and cruelty *may* relate to the arrest, imprisonment, and disfranchisement of the chief, "*Ma-za-sha*," or Red Iron. If it does, we are quite ready and willing to meet it, and show that his conduct was proper. Even in this instance, Gov. Ramsey was censured by those most familiar with the Indian character, for his extreme lenity.

But here let us pause and examine into his conduct towards this insolent, ungovernable, and rebellious chieftain, and his equally hostile and ungovernable band of "soldiers." What is the testimony? Simply, that Gov. Ramsey did arrest, imprison, and break of his chieftainship, this misguided and illy-advised chief. These facts were upon record. Gov. Ramsey admitted them in his written defence, on file in the Indian Bureau at Washington. They are facts that never were denied. In that defence, Gov. Ramsey gave a full, clear, impartial, and accurate statement of the facts, faithfully sustained by the testimony taken before the commissioners.

Why did Gov. Ramsey arrest, imprison, and disfranchise the chief "*Ma-za-sha*," or "*Red Iron*?"

The answer to this query must necessarily be somewhat lengthy. The evidence is, that in the month of November, 1852, Gov. Ramsey and Agent McLean went to Traverse des Sioux to take the rolls, and make to the Seeseetoans and Wahpaytoans their first payment, under the treaty of 1851, negotiated at the same place. Shortly after his arrival there, he discovered that *Red Iron* and his band, in connection with three or four Indians from some of the other bands, had established what is called a "Soldier's Lodge," for the purpose of controlling the other chiefs, who were, and who were to be, present during the payment. He had established a kind of martial law, and no chief, headman, brave, or common soldier, was permitted to act, in regard to anything connected with the payment, unless in his and his band's presence, or by his and his band's permission.

Upon the afternoon of the day upon which Gov. Ramsey and Agent McLean arrived, "*Limping Devil*," "*Young Sleepy Eyes*," "*Wahnah-k'soon-tay*," and "*O-tah-k'tay*," paid a visit of compliment and ceremony to the governor at his house. While in council, he requested them to return there the next day, as he had brought their annuity money, and their agent was there with him, ready to enroll them. They promised him they would do so, and retired. The same evening he was suddenly and hastily called for, to go out immediately and suppress a riotous assemblage of Indians, who had gone to the lodge of "*Young Sleepy Eyes*," and was told that, unless he did so promptly, there would probably be bloodshed. He hastened to the spot, and there found a crowd of Indians coming out of the young chief's lodge, and going away in a hurried and excited manner. Upon inquiry as to who

they were, and what their object in being there, he was informed that they were *Red Iron's soldiers*, who had come there for the purpose of assaulting and punishing "Young Sleepy Eyes" for having paid a visit to him in the afternoon. He directed his interpreter to say to them that he would have no such disgraceful conduct there, and bade the tiring crowd to stop. They did not, but some of them spoke; and their chiefs were not there, and that they would see him in the morning.

The ensuing morning, *Red Iron and his soldiers*, accompanied by "Big Gun" and "Limping Devil," went into council. In this council the witnesses describe his conduct, in manner and speech, as being "rude," "violent," "offensive," "excited," "disorderly," "contemptuous," and "insolent;" and that the whole council was a continued scene of disorder, turbulence, disobedience, and contempt towards the government authorities. The soldiers were likewise turbulent and disorderly, continually interrupting the chiefs by telling them what they must do, and that the most violent excitement and confusion prevailed, until, finally, the governor, seeing that they had become totally and wholly ungovernable, said to *Red Iron* that as he and his soldiers could not conduct and demean themselves in an orderly and respectful manner, he would adjourn the council, which he accordingly did.

This was the period at which the influence of *Red Iron and his soldiers' lodge* began to be most severely felt by the other chiefs and Indians on the prairie. He issued his *ukase* that no chief should hold any communication or intercourse with the government officers unless he and his "soldiers" were present. The chiefs were thus intimidated and kept from acting as they desired. They felt that their lives were in jeopardy; and, covered by the shadows of night, crept to the governor's quarters, and besought him to send for the United States troops to protect them from violence. The whole action of the government officers was thus paralyzed; the agent was prevented from completing the annuity rolls, and all business, for the time, was suspended.

Hour after hour the hostile chief and his band were to be seen parading the prairie, discharging their guns in bravado, and menacing the other Indians.

Time after time were messengers dispatched to call in the chiefs to council, that an enumeration might be made and their pay-rolls completed; but as often were the answers returned: "*we dare not.*" "*we are afraid of Red Iron and his soldiers' lodge.*" They stated that their own bands and the upper chiefs were not all in yet; for that reason they were afraid to act, as they were too weak in numbers to compete with the hostile and menacing band of *Red Iron*. Nor in these invitations to council was *Red Iron* ever neglected. He was sent for again and again; always promised, but never came.

This state of violence on the one part, and of inaction on the other, continued until the arrival of the United States troops, which had been ordered from Fort Snelling, at the request of Governor Ramsey.

On or about the 19th of November, a company of infantry and dragoons, consisting in all of sixty-five men, arrived at the Trading Post under the command of Captain James Munroe, jr., and Lieutenant C. Kelton, U. S. A. The troops took up their position with a view to command the road leading to Governor Ramsey's quarters, and

house in which he held his councils. While the troops were engaged in pitching of their tents, a large body of Indians, fully armed and equipped with rifles and other firearms, made their appearance on the elevation in front of Governor Ramsey's quarters, and with whooping and yelling, their whole manner marked by high excitement, moved down from *Mr. Sweetser's house* straight towards the line of Captain Monroe's troops. When still some distance off, though sufficiently near to be spoken with, Captain Monroe, through an interpreter, told them they could not pass his lines. To this order they paid no attention whatever; but continued to move forward at a rapid rate, as if to pass directly across the line of troops. At this juncture, the troops handled their arms, and serious apprehensions were felt that a collision was inevitable. One of the foremost Indians cocked his rifle as he advanced, and the sergeant drew his sabre. One step farther, and the illy-advised chief and his men would have paid dearly for his temerity. They retired, but not till there was no option left them but to do so, or receive the fire of the troops. As soon as they halted, they were informed of the order of Governor Ramsey, that so large a body of armed men would not be permitted to accompany any chief into council; but that the chief was at liberty to pass with three or four of his men. At this announcement there was a loud and unanimous "*no!*" and they wheeled and returned towards *Mr. Sweetser's trading-house*, with one exception, and he, with his rifle, drove off a number of Indians who were standing in the vicinity, spectators of the previous scene. After they had retired to the neighborhood of *Mr. Sweetser's trading-house again*, they discharged several rifles, and Captain Monroe heard the balls whistle over his head.

It is somewhat remarkable, that in all cases of trouble or difficulty with the Indians, throughout this whole payment scene, and before, both at Mendota, where the half-breed paper was indignantly torn to atoms by one of the Indians, and at Traverse des Sioux, the name of Madison Sweetser, the gentleman who made most of these charges, has marked prominence. In this instance, we find the Indians coming from his house with hostile demonstrations, and when checked by the troops, returning thither. *Query*: Do the Indians always act without advisers? Mr. Sweetser was constituted their national guardian, by his power of attorney of December 6, 1851, executed by three chiefs and eighteen young men and braves.

Subsequently to this, Governor Ramsey sent two or three times, in as many days, to this chief, to repair to the council room, where he was needed to make out the roll. He did not come, and the last time a request was made to him to come, for the purpose of making the order as imposing as possible, Governor Ramsey sent Lieutenant Kelton, in full uniform; and to prevent all mistake or misapprehension, in the delivery of the message by the interpreter, he sent two, that one might be a check upon the other. The message was delivered, and Red Iron fixed the hour of ten o'clock the next morning, as the time for his appearance in council. The hour arrived, but the chief did not. Shortly after the hour, however, he and his armed band were seen parading in front of the village of Traverse, and in full view of the governor's quarters, as if to show his contempt for his authority and that of the government. This kind of bravado was of daily occurrence. He and his soldiers

might have been seen at almost any hour, parading from house to house and from lodge to lodge, threatening the other chiefs and Indians, and by these means influencing and governing their actions:—the real object and effect of a “soldier’s lodge.” Governor Ramsey had been frequently advised, by those present and who were familiar with Indian character and customs, to cause the arrest of this chief. But ever kind and indulgent in his feelings and conduct towards these ignorant people, he still hoped that this misguided man would see his error, fathom the schemes of those who were badly advising him, and voluntarily come in and make amends for his past misconduct. He felt assured that the chief was not so much to be censured as were his advisers and counsellors—those who stood behind him as prompters, and who were zealously laboring to thwart the payment, thinking by that means to hold the government responsible for a reappropriation of the money. This last act of contumacy and contemptuous behavior brought matters to a crisis, and Governor Ramsey was constrained either to yield to the chief and his band, relinquish the object of his visit, and return to St. Paul, leaving his duty undischarged, and the chief and his band masters of the field, or to cause his arrest, compel his obedience, and annihilate the hostile and belligerent organization. He adopted the latter course. A detachment of troops was dispatched for him, and he was brought in. Governor Ramsey reprimanded him in a mild, but positive manner—told him of his evil doings; that he had interfered with, and interrupted the business of the government, and asked him why he had not come to him when he had been so repeatedly sent for. To this Red Iron replied, that the soldiers would not permit him to come. The governor then said to him, inasmuch as he had made him a chief in 1851, at the recommendation of his friends, in the hope that he would behave himself worthily as a chief, which he had not done, but, on the contrary, had acted badly, and could not control and restrain his people from improper, disorderly, and insolent conduct, he was unfit to be a chief, and was, therefore, broken of his authority as such, and that he would now be placed under arrest, and remain there, until his “soldier’s lodge” was disbanded, or until he gave some assurance of his future good conduct. He was consequently placed in the charge of a sentinel for the night. His treatment during his confinement was neither harsh nor oppressive; on the contrary, Colonel Dousman speaks of its being extremely mild, and that he fared as well, if not better, than many of the whites, who were present at the payment; being plentifully supplied with both food and blankets, and lodged in a comfortable room.

On the following morning, his soldiers, accompanied by the whole of the chiefs on the prairie, came into council, and asked for his release, stating that their “soldier’s lodge” had been broken up and disbanded. Red Iron was then brought in; he stated that he had been *badly advised by white men*, that he was sorry for his conduct, and in the future would behave himself in a proper manner. After giving the whole of the chiefs and Indians present some salutary advice, and explaining to them their relations and obligations to the government, and the respect due to its representatives, he discharged him from arrest.

This is the only instance in which it ever became necessary for Governor Ramsey to use coercive means of any kind to insure

dience and respect from the Indians ; and this was occasioned by the *bad advice of white men*, according to the chief's own statement. In this case he was compelled, by sound policy, to act in the manner he did. This refractory chief had set at defiance the representatives of the government, had exhibited the grossest contempt for its authority, assailed the dignity of its highest official in the territory, had threatened, intimidated and maltreated the other chiefs, had caused the utter suspension of all public business, and, generally, had so demeaned himself, that if he had not been checked, it would have destroyed the power and influence of the government over the whole nation or tribe, and produced a spirit of opposition, anarchy, and insubordination, that it would have required years of care and annoyance to correct. Governor Ramsey checked this evil in the bud, and taught the Indians to understand, that the officers of the government must be respected and obeyed.

It is true, it is in evidence that Red Iron said his object in establishing the "soldiers' lodge," was to prevent young men and single chiefs from going at night and signing papers, without the rest of the chiefs seeing and knowing what they were doing ; but this is not true in fact ; his own conduct, and that of his band, in their first covert act of hostility, gives the lie to this flimsy apology for his insolent, refractory and contumacious conduct. Why did his soldiers assault and maltreat "Young Sleepy Eyes" ? Was this for going at night and alone to sign papers ? No ; he had paid a visit of mere ceremony, in the company of a number of his fellow chiefs, and his own and their young men, in open day, and without disguise ! Why did he threaten the other chiefs, and tell them they should not go into council at all, unless he and his band were present ? Was this to prevent young men and single chiefs from going at night and alone to sign papers ? No ; it was to interrupt and thwart the object of the government in making the payment. Why did he and his soldiers, day after day, and hour after hour, parade the grounds in a menacing and hostile manner, discharging their guns, and threatening the other chiefs with violence ? Was this to prevent young men and chiefs from going into council at night and alone to sign papers ? No ; it was for the purpose of effecting, what, for a time, was effected, the suspension of all government business.

But, as far as Governor Ramsey's actions were concerned, it mattered not what his *real object* might have been in establishing the soldier's lodge. One thing is certain ; his conduct had the *effect* of intimidating the chiefs, and producing delay and trouble to the officers of the government. That this was the *effect*, is the testimony of every witness who was present ; that the chiefs said so to Governor Ramsey is uncontradicted ; and that he and his soldiers were the *cause*, is a fact equally well authenticated. Had his only motive been that which he alleges, Red Iron would have disbanded his "soldiers' lodge" the moment he became aware of the effect it was producing. This he did not do ; and the pertinacity with which the organization was adhered to, as well as his conduct in other respects, gives the lie to his asseverations.

Having thus given a true and faithful narrative of the facts which led to his arrest and imprisonment, as detailed by the evidence, we

ask, in all sincerity, was Governor Ramsey culpable for his conduct in this matter? Is there anything in the evidence showing either cruelty or oppressive treatment towards this or any other chief? We answer unhesitatingly, no! And we assert, that, if Governor Ramsey's conduct was censurable at all in this whole affair, it was because he did not sooner arrest and imprison him, and for not having punished him severely when he was arrested. The arrest was no punishment, the imprisonment was temporary and less than he deserved, and than was necessary as an example to deter others from offending in like manner. What in all this savors of cruelty and oppression? We say there is nothing. And, having confined ourselves entirely to the record, we hold, that instead of cruelty, harshness, or oppression, Governor Ramsey's conduct towards the Indians has been marked by kindness, indulgence, and, if anything, an overwrought sympathy, for a misguided and illy-advised offender.

The next clause of the sixth charge is, that Governor Ramsey "substituted unauthorized persons as chiefs and braves," and procured receipts from them, which he is attempting to foist upon the department in settlement of his accounts with the Indian bureau.

We premise the consideration of this clause with the declaration that it is untrue, and that it was known to be so by him who made it. Had it not been known to be so, how easily might the names of substitutes have been recited! But this would have made the falsehood too apparent, and therefore the general character of the allegation.

There is not in evidence a single item of proof, that ever any substitution was made by Governor Ramsey, of either chief or brave, nor is the allegation true in fact. There never was a substitution made by Governor Ramsey, on any occasion, or for any purpose. The only chief he ever created among the Seeseetoan or Wahpaytoan bands was this same refractory and wrongfully influenced chief, Red Iron. It is true he was broken of his chieftainship, but no one was substituted in his place. Among the lower bands, there was at no time the creation of any chiefs; nor were ever any broke or substituted.

It is a fact, however, that Colonel Luke Lea, the Commissioner of Indian Affairs, and one of the commissioners appointed to treat with the Sioux Indians in 1851, did, at the request, and upon the personal application of "Old Sleepy Eyes" and his band, made in open council, with all due form and ceremony, and upon the statement of the chief that he was growing old and unfit to attend to the affairs of the band, recognize "Young Sleepy Eyes" as the future chief of the band. This was done nearly eighteen months before the payment, and in the same day the treaty was signed, as will be seen by reference to the testimony of the Rev. Mr. Williamson, Jos. R. Brown, Dr. Foster, secretary to the commission, and others. Thus ends the sixth charge of Mr. Madison Sweetser, without a word of testimony having been adduced to sustain any part of it; notwithstanding he had three months to do it in, and an officer engaged in running down witnesses from the lakes to the Missouri.

The fourth charge of Mr. Robertson is, "that Governor Ramsey refused to pay said Indians the amount due them under the treaty aforesaid, but by force and intimidation attempted to compel them

consent to such a disposition of said money as he desired, and by his conduct in this regard treated them with injustice and cruelty, and in violation of law, treaty stipulations, and his own solemn pledges previously made to said Indians."

In answer to this charge of using force, intimidation, injustice and cruelty, we refer you to what was said in reply to the first part of the sixth charge of Mr. Sweetser; merely adding that there is not a scintilla of proof, that force, intimidation, or menace was ever used by Governor Ramsey to compel the Indians to consent to such a disposition of their money as he desired, or for any other purpose whatever. Nor is there the slightest evidence of any kind that he ever treated them, or attempted to treat them, with either injustice, cruelty, or force, in this or any other regard. But, on the other hand, the proof is full, positive and uncontradicted, and even undenied, that he never did treat them cruelly and unjustly, but the contrary. The same charge alleges that this cruelty and injustice consisted in the force and intimidation, and a refusal to pay them the money due under the treaties in violation of law and treaty stipulations. Having answered the charge of force, intimidation, cruelty and oppression generally, we will pass over that portion of it, which alleges violation of law and treaty stipulations, as that will be fully discussed when we come to the consideration of the authority under which the disbursements of the Sioux moneys were made. And we think we will be able to show, with clearness and certainty, that there was neither cruelty nor injustice done to the Indians; but that the disbursements made of the Sioux moneys was not only most advantageous to the Indians themselves, but made in accordance with their most solemn obligations and directions, made voluntarily and in open council; and that there was neither violation of law nor of treaty stipulations in such disbursements.

As to that portion of the charge which alleges violation of solemn pledges previously made to the Indians by Governor Ramsey, it is open to the same objections that have characterized the whole series. It is vague, uncertain and indefinite, as it is possible to frame it. Neither time, place, circumstances or person is named to direct our attention of the accused, or enable us to tell when, where, or under what circumstances, (whether in 1851, or 1852,) or either or neither, or in relation to what band or tribe of Sioux Indians these alleged pledges were made, or in what manner his said pledges were violated. It does not even state what the pledges were, what they had relation to, nor give any, even the most general, circumstance, that might have a tendency to put us on our guard. All these things should have appeared. They should have been stated with perspicuity and accuracy. Certainty, to a certain extent in general, at least, should distinguish every charge which calls for either answer or inquiry, should pervade every charge which alleges either misconduct or fraud in a government officer; and we will venture the assertion, that the likes of these charges were never before referred for examination by either officer or government. And although, when charges affecting the propriety of his conduct were first made in the public newspapers, and his integrity assailed, Governor Ramsey did make known to the Indian office, as

well as to the United States Senate, his desire that an investigation should be had, still he did not suppose that he had, by showing this desire, forfeited all claims to justice, but that the government would see that, if an investigation was ordered, it would be conducted by some known and proper rules. It was the bounden duty of the government either to compel proper charges and specifications to be framed and exclude all irrelevant testimony offered under such as those preferred by Sweetser and Robinson in this case. It did neither; yet these charges were susceptible of neither a direct and positive denial on the one hand, nor of a direct and unequivocal admission on the other.

There is no evidence to sustain this charge, general as it is, embracing all time and the whole Sioux nation; and as no pledges have been shown to have been made, none, of course, are shown to have been violated.

It may have been to sustain this charge, however, that Agent McLean's attention was directed to a letter or report, addressed by him to the Commissioner of Indian Affairs, dated December 13, 1851, which is to be found in Senate Doc. 29, pages 20, 21, and 22, and the list to which the letter refers on page 23 of the same document.

The witness says the facts stated in that paper are true, to the best of his knowledge. Suppose they are true, in what manner do they affect Governor Ramsey, or in what manner do they sustain the charge of violating pledges? It will be seen that the letter was written nearly a year before Governor Ramsey had anything whatever to do with the distribution of the Sioux money—long before the treaties were ratified or the amendments considered. How, then, could it affect Governor Ramsey's connection with the Sioux payment? for it is presumed the charge had reference to that, as it is the basis of the whole catalogue. This letter has reference to what purports to have taken place in a council at the house of Governor Ramsey on the 8th of December, 1851. It will be remembered that it was two days previous to this, the 6th of December, that the Indians constituted and appointed, by their written power of attorney, Madison Sweetser their national and tribal guardian, and that holding this council was their first grand tribal act under his auspices.

The Indians who composed this council were twenty-two in number, being three chiefs and eighteen braves and soldiers. These Indians, as would seem from this letter or report of Agent McLean, were opposed to the payment of their debts, or that any part of the \$275,000 should be appropriated to that object. That these chiefs and braves, representing to be a large "*moiety*" IF NOT A "MAJORITY" of the Wahpaytoan and Seeseetoan Indians—which, by-the-way, is not true—protested against carrying out the condition of a certain paper which they had signed when they had signed the treaty, transferring, "in payment of a debt to a 'portion' of their traders," &c., more than four-fifths of \$275,000 allowed them by treaty stipulations; that they had signed that paper without knowing its contents; that it had never been explained to them; and they desired these facts might be made known to the Great Father at Washington, that he might send them their money according to the stipulations of the treaty. In reply to these complaints

Governor Ramsey read and explained to them particularly that part of the treaty which relates to the payment of the \$275,000 given therein "to enable them to settle their affairs, meet their just engagements, and remove and subsist themselves for one year after they had removed to their new homes." He told them the language was specific—to be paid to the chiefs and braves of the tribe, in such manner as they, in open council, should determine, &c. That the government would carry out the stipulations of the treaty, without regard to any agreement or contract to traders and others; that the money would be paid to the chiefs and braves, and it was for them to dispose of it as they thought proper. That the paper to which they alluded, was no part of the treaty, &c., &c.; and that he would request the agent to make known their wishes to their Great Father, &c. That the commissioners had no power and assumed none, in regard to the debts of the traders, and that *that was a matter entirely between themselves.*

Even if these things were important they were not in proof, nor as proof can the statements made in that letter be placed properly on the record. A mere general statement, that a number of facts contained in a long written narrative, such as this, are true, to the best of one's knowledge and belief, does not amount to proof of those facts. The witnesses statement, to make them proof, must be distinct, naming each fact. Nor is it proper to permit a witness to examine a paper, concerning which he is testifying, to ascertain whether a certain fact is stated negatively or affirmatively, even if such fact is material. But we do not wish to cavil about what is or is not properly upon the record, for if we did that, we would take exceptions to every sentence that is contained in the commissioners' notes.

The whole of these facts may be true, though not properly proved, and we are willing to take them as they are, and as though every form had been complied with; and only notice the manner in which it was placed upon the record, as one of the thousand instances of unfairness pursued towards Governor Ramsey, during this whole investigation.

Considering the facts as true even, wherein are they evidence to sustain the charges of violated pledges, and injustice, and cruelty to the Indians? Governor Ramsey's promise, that agent McLean should make their complaints known at Washington, has been complied with; this letter is the evidence of that fact, though produced, if for any purpose that can possibly be conjectured, to sustain the charge we have been considering. He told the Indians, according to this report of the agents, that the government would pay them their money in such manner as the chiefs should, in open council determine, without regard to any agreement or contract with traders or others. The government did so. It followed their own solemn directions, given in open council, and affirmed and reaffirmed in open council. He told them the paper they alluded to was no part of the treaty. In this he told them the truth. He told them the debts they owed to their traders were matters entirely between themselves, with which the commissioners had nothing to do. Was this not the truth? Where then are the violated pledges?

But as before remarked, at the time of this council, to which McLean refers, was held, Governor Ramsey had nothing to do with the dis-

bursements of their money. He knew, it is true, that they had made some arrangement for the payment of their debts, for that was known to every person present upon the treaty-ground, both white men and Indians, but until nearly a year after the council, he never saw the "Traders' Paper," or knew what it contained. But even, if he had seen it, had known its contents, and had iterated and reiterated a thousand times, that the money would be paid according to the stipulations of the treaty, and without regard to any contract or agreement with traders or others, it could not have affected the force or validity of the paper, the execution of which has been proved by at least a dozen respectable witnesses. In this connection it must not be forgotten, and supposing all here alleged to be true, the circumstances were materially changed when, by the tribal act of the Sisseton and Warpaton chiefs on the 8th September, 1852, they constituted Governor Ramsey their agent in this matter, directing and requesting him to draw the \$275,000 and do all the acts contemplated by them to be done. This was nine months subsequent to the conversation reported by agent McLane. It is true, at the time of that council, the Indians told Governor Ramsey that they had been imposed upon, and signed that paper believing it to be a copy of the treaty; but this unblushing falsehood has been laid bare by the testimony of more than a half-dozen of men of unquestionable veracity.

It will not be amiss to name a small but very conclusive circumstance, in this connexion, which was omitted when we had the execution of the "Traders' Paper" under consideration. It will be remembered that the people who executed this paper are Indians; and that this was the first treaty they had ever negotiated. It will likewise be well to remember, that their sources of information are extremely limited, and never before having made a treaty, or done any kind of official business with the government, they could hardly be presumed to know the formulas adopted by the government in consummating a negotiation of that character. This being the fact, is it not a somewhat remarkable coincidence, that these Indians should all know that it was the practice of the government to have duplicates of the treaties signed; and, that they should all be possessed of the same idea, when they were signing the "Traders' Paper;" that was, that they were signing another copy of the treaty. Let it be remarked, also, in this connection, that none of them were ever told that it was a copy of the treaty, but that it was an innate idea—the offspring of their own minds! Let it likewise be remembered here, that these complaints were made to Governor Ramsey, but two days subsequently to the execution of the power of attorney to Mr. Sweetser, constituting him their agent, superintendent and national protector. The coincidences thicken; they present themselves in such rapid succession as to appear less natural, and to put the mind upon the inquiry for their cause. Nearly six months had elapsed from the signing of the treaty. The Indians had, during all that time, discovered no fraud upon them. They had acted under the "Traders' Paper;" they had seen the list which they themselves had made attached to it; they had seen the traders' list or schedule in the act of being copied upon that paper; they had seen it afterwards, and spoken of it, and called the traders

residing in the country fools, for giving any part of \$210,000 to those residing out of it, and not keeping the whole sum to themselves. They spoke of the paper frequently, and discovered no evidence of fraud, until they met Mr. Sweetser. It is then remembered, that they had been grievously wronged. Mr. Sweetser becomes their friend, their advocate, their protector. They discover, also, how they were wronged: they had signed that paper believing it to be a copy of the treaty; they go at once, some of them over two hundred miles, to see their agent and superintendent. They make their complaints to both, and the latter, no doubt, knowing that they had just given this power of attorney to Mr. Sweetser, to enable him to receive from the government any receipt to it for any sum of money that he might "*save*" from their contracts with their traders, &c., may, in the hurry of business, have stated generally to the Indians, the substance of what agent McLean has embodied, from recollection, in his report; and this, the more likely to have been the case, from the fact of the influences they were acting under at the time. What are the irresistible influences from all these facts? Were the Indians deceived at the time of the treaty, or were they deceived afterwards? Were they entrapped into signing the "Traders' Paper," or were they misguided and deceived by those who brought trouble into their camps, where peace and quiet and satisfaction reigned before? Can it be possible that they did not know that they were signing a paper for the payment of their debts? And why is it that "Wah-nok-soon-tay," the Little Rapids chief, who resides at a distance from Traverse des Sioux, acknowledges that he signed the paper, and knew he was signing the paper for the traders; while all the chiefs in the vicinity of the Traverse deny any knowledge of it, and all tell the same tale, as to the idea that possessed them, when they turned from the commissioners' table to the one at which Joseph R. Brown presided, to sign the paper he held? The answer is plain: "Wah-nak-soon-tay" was not under the same influences; he had not memorized the same lesson. But these comments are unnecessary. The proof is plain; too ample and too clear to bear discussion. Where then is the injustice and cruelty? Where the evidence of violated pledges on the part of Governor Ramsey?

Thus do we end the consideration of this anomalous and heterogeneous mass, denominated a "charge" by Mr. D. A. Robertson.

The eighth charge of Mr. Sweetser is rather a singular one, when we consider the character of those which accompany it, as well as the fact that Mr. Sweetser used every means in his power to obtain the control of this Sioux fund. It is this:

"That Governor Ramsey openly violated the treaty *in not reserving* a sufficient amount out of the Seeseetoans and Wahpatoans to remove and subsist them for one year."

When it has been contended, by those making the charges against Governor Ramsey, that he violated the treaty in not paying the whole fund into the hands of the chiefs and braves, a charge of this kind comes with an ill grace from the same source. For the sake of common decency, one would have supposed they would try to be consistent, even in falsehood. But such is not the case. This charge is a virtual relinquishment of all that have preceded it. For we hold, and

the treaty will sustain and bear us out in the position, that the same clause and the same language which provides for the removal and subsistence of the Indians provides also for the settlement of their affairs and the payment of their just engagements; and if Governor Ramsey would have been censurable for not reserving a sufficient amount for their removal and subsistence—and we agree that he would have been—he would have been equally culpable had he not retained a sufficient amount from them to settle their affairs and pay their just engagements. *a fortiori*, if he had a right to retain the former, he had likewise the right to retain the latter. If he knew, in the former case, that the fund if paid out into their hands, would not be honestly and faithfully appropriated, he was bound by the same knowledge to act in the same manner in regard to the latter. It was, therefore, just as obligatory on Governor Ramsey to see to the proper appropriation of the money in the one case as in the other. But to the charge—and what is the charge to sustain it? Not a syllable. And, even if there was, it would be no evidence of fraud or misconduct on the part of Governor Ramsey, but at most an error in judgment. But the fact is, the amount retained was designated by themselves and abundantly sufficient.

The ninth charge of Mr. Sweetser is: That Governor Ramsey paid nearly the entire *trust fund* of said Indians, amounting to near \$450,000 at the trading house of H. H. Sibley; and but few, if any, were benefited by said payment, but those who now are, or have been, connected with said company in trade, and with whom he was confederating. That there are many other meritorious creditors who were thrust aside and not permitted to share in the distribution.

This charge is, as regards the truth it embraces, on a par with those that have gone before it. It is wholly false, and entirely unsupported by the evidence. Governor Ramsey, as far as we know, and certainly as far as the evidence goes to sustain it, never paid one dollar of money to any person at the trading-house of H. H. Sibley. And although Governor Ramsey did not pay the claimants as charged, yet, the other portion of the charge is equally untrue, “that few, if any, were benefited, but those who are now or have been connected with said company in trade.” But who or what said company is, neither the charge nor the evidence explain to us. Still we are enabled to pronounce it generally false; as it is in evidence, that every licensed trader in the Sioux country, prior to July, 1851, among the upper Indians, with one exception, (and his claim was not presented,) and every licensed trader among the lower bands, since 1837, up to which period the Medawakantoans had paid their debts, were participants in the distribution of the fund. The claim against the upper Indians, that forms the exception, was of a date prior to 1821, and for this reason, it is stated, was excluded by the distributing committee, and was never brought to the attention of Governor Ramsey. Then, with this single isolated exception, all the claimants came in and received a part of the fund set apart for the payment of their “present just engagements” by the Indians on the 23d of July, 1851.

The list of licensed traders below, and the testimony of almost every witness in regard to the upper, sustains this position and disposes of the charge. The distribution of that fund was fair and equitable. This

the testimony of those even who did not receive one-half of what they expected, and little over one-third of what they claimed. This distribution was made by the traders themselves, than whom no better jurors could be found; as it was made the interest of each to reduce the others, claim, in order to share more bountifully in the specific sum which was appropriated for their benefit. The last clause is, that meritorious creditors were excluded. This has been answered in replying to the former part of the charge. The testimony of Messrs. Sibley, Brown, Forbes, McLeod, Faribault, Prescott, and the list of licensed traders before referred to, is conclusive against this portion of the charge. It is unfounded and untrue in fact.

But this charge admits that this fund became a "*trust fund*" in the hands of Governor Ramsey. It is so denominated in the body of the charge, and properly so, too. If then, as we contend, and as the charge admits, it was a "*trust fund*," what was the object of that trust? For what purpose was that "*trust*" created, and how is that purpose to be known? Simply from the acts of the chiefs and braves, under whose direction it was to be distributed. What were those acts, and do they, taken either singly or conjointly, amount to a direction of the "*trust fund*?" Further, do these acts appear, from the testimony taken before the commissioners who conducted this investigation? Let us examine:

On the 23d of July, 1851, the chiefs and braves who signed the treaty of Traverse des Sioux, executed a paper, making distribution of the sum of \$250,000 among their traders and half-breed relatives. The execution of this paper has been fully and fairly proved by the most incontestible evidences. The previous direction, by the Indians to the traders, to distribute \$210,000 of this sum among themselves, is a fact equally well authenticated and established. That after the distribution had been made, the chiefs and braves above, and the chiefs and head-men of the lower bands, after the treaty, frequently spoke of the provision made for their traders and half-breeds, and that they were to be paid out of the proceeds of the sale of their lands. The fact of their going into council, both above and below, to distribute the fund named in the treaty, and their frequent expressions of unqualified approbation of their own act, in providing for the payment of their debts, are all facts of a most convincing and conclusive character.

It is likewise in evidence, by the testimony of the Hon. Luke Lea, Commissioner of Indian Affairs, Rev. Mr. Williamson, Rev. Mr. Riggs, Messrs. Sibley, McLeod, Steel, Dousman, Bailly, Forbes, Prescott, Faribault, Huggins, Foster, and others, that the payment of their debts and the provision to be made for them, was a subject of daily and hourly conversation and consideration among the Indians, traders, and others, in private and public councils, in the presence of the commissioners, and elsewhere; that they admitted an indebtedness above, of over \$400,000, and below, of over \$140,000; that these sums were more than double the amount agreed by the traders to be received in full acquittance and release of all claims upon them; and that they felt, and evinced as much interest upon the subject of making some provision for their traders, as with any other connected with the treaty; that they claimed of the commissioners an allowance of \$300,000 for their traders, and \$100,000 for their half-breeds, and for a long time refused

to sign the treaty, unless such allowances were made. Was not this in itself, a sufficient direction to Gov. Ramsey to distribute this money? This paper, commonly called the "Traders' Paper," is not a power of attorney, nor does it contain any of the essentials of a power of attorney. It is an instrument of a higher and more obligatory character. It is in fact, and in law, an assignment of the sum of \$250,000. The consideration expressed in the body of it is a good and sufficient one. It divests all the right of the obligors or makers of that paper to that sum of money due them under the first clause of the fourth article of the treaty of Traverse des Sioux, and vests it in the persons whose names are on the list or schedule attached to it. It appropriates to each individual the sum placed opposite his name. This is the true character and force of that instrument. It is, to all intents and purposes, an assignment, expressed in sufficiently apt and appropriate terms, and as binding and irrevocable as the treaty itself, executed at the same time.

The character and effect of this paper has been discussed at length, in anticipation of the provisions of the one which is to follow and support it, and likewise in anticipation of the position that might be assumed, and the inferences that might be drawn, from a hasty or cursory reading and comparison of the provisions of the two papers, well as for the purpose of meeting the position assumed by the commissioners, who held that the latter abrogated and destroyed the former. Upon a careful examination of these papers, it must become manifest to every unprejudiced mind that, instead of conflicting with or abrogating it, the latter confirms and sustains the other. The language of the two papers is, in many instances, identical; and that their purport and intention are the same is manifest, the only difference being that the one is less specific than the other. This circumstance gives force to the position that the power of attorney executed to Gov. Ramsey on the 8th of September, 1851, was an adjunct or supplement to the "Traders' Paper." This power of attorney is to be found on pages 26 and 27 of Senate Document 29, part ii. It was executed to Gov. Ramsey on the same day, at the same time, and by the same Indians who signed the Senate amendments to the treaty of Traverse des Sioux.

It is true this paper contains a clause revoking "all other and former powers of attorney" executed by the Indians, with reference to the receipt or collection of the moneys due them, or any part of it. Now, had this assignment, or "Traders' Paper," been the only paper ever executed by them relating to a disposition of this fund, the presumption might have naturally enough arisen that the revocation clause in the power of attorney had reference to it; but that presumption is entirely destroyed and shifted by the production of a power of attorney, *co nomine*, which they had executed anterior to the date of the one made to Gov. Ramsey. This is the true legal as well as natural inference and conclusion upon these facts, and entirely relieves from such inference or presumption, any paper or instrument of a different character, which may have been made by them.

But, by the direct and positive testimony of Mr. Prescott, the person who interpreted the power of attorney of September 8, 1852, and who must know better than any other man what papers were referred to and to be affected by, the revoking clause in that power, as it was u

derstood by the Indians when making or executing it, is, that it had reference to the power of attorney to Madison Sweetser, and also to one to Mr. Sibley.

The power of attorney to which reference is here made, is the one executed to Mr. Sweetser by some of the chiefs and eighteen headmen and soldiers of the Seesetoan and Wahpaytoan bands of Sioux, at the St. Peter's agency, on the 6th of December, 1851, constituting him their national defender and protector. This is a power of attorney *eo nomine*, and plainly intended by the subsequent act to be revoked, even in the absence of Mr. Prescott's testimony, which fixes it beyond all question. The character of the power of attorney to Mr. Sibley does not appear from the evidence.

By the notes of testimony taken by the commissioners, Agent McLean is made to say that the power of attorney to Governor Ramsey was intended to "*destroy all other papers*" executed by the Indians, and that the Indians so expressed themselves to Governor Ramsey at the time they went to his house to execute it. This is an error. The witness said that the Indians told Governor Ramsey that "they had come there to sign the amendments to the treaty and another paper, breaking their former or all former powers of attorney." This may not be intended in the commissioners' notes to express this idea, as the whole of McLean's testimony, as taken down by them, is in a state of inextricable confusion; but it clearly does so, and is wrong. But Mr. Prescott's testimony places this matter beyond doubt, and he alone can know what was said to the Indians, and what was said by them; he alone of the persons present understanding the Sioux language. Therefore these two instruments do not come in conflict, nor was it intended by those who made them that they should. If it had been the "Traders Paper," being entirely dissimilar to a "power of attorney," and not presumed to be embraced under that general name, would have been indicated by some other language. Instead of conflicting, the one comes in and provides the means of satisfying the obligations created by the other. They thus stand together a perfect whole, a unit, while either without the other would be imperfect.

Let us now glance for a moment at the authority these two papers confer upon Governor Ramsey, and the obligations he assumes when he accepts the trust created by the power of attorney.

The first assigns to the traders, half-breeds and others, claimants against the upper Indians, the sum of \$250,000 out of the \$275,000 named in the first clause of the fourth article of the treaty of Traverse des Sioux. The execution of this paper has been before referred to, and there is not a doubt that can possibly exist against the manner in which it was done. To question the fact that that paper was fully, fairly, and in good faith, interpreted and explained to the Indians before they signed it, is to charge the Rev. Mr. Riggs, Mr. Sibley, Mr. Brown, Mr. Martin McLeod, Mr. Faribault, Dr. Foster and others, men of the highest respectability and character, with wilful and premeditated perjury. To question the fact that these Indians directed the traders to make a distribution of the \$210,000 among themselves, is likewise to charge Mr. Bailly, Mr. Sibley, Mr. Steel, Mr. Brown, and Mr. McLeod, with wilful and direct perjury. Such charges as these are of rather too

serious a character to be made upon inferences, or what is still less reliable, the testimony of Indians who had been taught that it was their interest to sustain Mr. Sweetser's charges. To question the fairness and equity of the distribution made by the traders amongst themselves, is to charge nearly every white witness who testified before these commissioners with wilful and premeditated perjury, and to put more faith in the simple charges of men who went into the country sometime after these things were done—most of which charges have been proved to be untrue—than in all the sworn statements upon the record. To question the fact that the Indians ratified and confirmed both the half-breed and traders' distribution after they were made, is to charge upon Mr. McLeod wilful and premeditated perjury. We presume no man will be willing to make charges such as these, and without making them, the validity of the paper, and the propriety of its execution, must remain unquestioned, as both are, in fact, unquestionable in honesty.

Great care was taken by the commissioners and their attorney to prove two facts: that the paper was not explained to them in the council where it was signed, and that the schedule was not attached at that time. It was never pretended that it was explained to them at that council; that was impracticable without interrupting the business of the government; nor was it ever pretended that the schedule was attached at the time it was signed; the language of the paper itself precludes such an inference. It provides that they will pay the sum of money acknowledged to be due "to the individuals '*HEREAFTER designated;*'" not simply "*designated,*" or *hereinafter designated,* but "*hereafter designated.*" Showing, as clearly as language could express it, that the act indicating the individuals, and the amount to be paid to each, was to be performed subsequently to the signing of the paper itself.

We will now proceed to the consideration of the power of attorney and articles of trusts from the See-see-toans and Wab-pay-toans to Governor Ramsey, dated September 8, 1852.

From the testimony of Philander Prescott and Agent McLean, and from the certificate of the latter appended to the power, &c., its execution is fully sustained. It is also in proof by these two gentlemen that it was fully and particularly explained and interpreted to the Indians before they signed; that they had a full knowledge of its contents, purpose, and meaning; and that they executed it for the uses and purposes therein expressed. They testify, further, that it was done in the presence of Governor Ramsey and themselves, in full open council, at the same time, and by the same Indians who ratified the amendments to the treaty. The construction and effect of this power will be made the subject of consideration in a subsequent part of this paper.

The *third* charge of Mr. Sweetser and the *seventh* of Mr. Roberts being substantially the same, will be renewed in connexion, as the same evidence that disproves the one will fix falsehood on the other.

The charge of Sweetser is: "That Governor Ramsey violated the treaty with the Dakota Indians in refusing payment to them, although often and urgently demanded, in accordance with their treaty stipulations—with having unlawfully paid said money into the hands of

Hugh Tyler, who demanded it, among a few claimants, at the trading post of the H. H. Sibley—the wishes and rights of the Indians having been totally disregarded in violation of law and the express stipulations of the treaties.”

Robertson's is: “That, in consummation of the frauds above alleged, Alexander Ramsey paid a large amount of money due the Dakota Indians by treaty, and by him received to pay them, to the said Hugh Tyler, who paid it chiefly to traders connected with the fur company of Pierre Chouteau and others, which proceeding was in violation of law and treaty stipulations.”

It will be perceived that these charges are in direct conflict with the allegations contained in the *ninth* charge of Mr. Sweetser, which alleges that Governor Ramsey paid out the “entire trust fund of said Indians, &c., at the trading house of H. H. Sibley,” &c., while here it is alleged he paid the whole fund to Hugh Tyler, &c.

The demand made by the Indians, and the refusal to pay by Governor Ramsey, we will reserve for consideration hereafter.

We admit here, and Governor Ramsey never has pretended to deny, but has placed the evidence of the fact upon the records at Washington, that he did pay to Hugh Tyler, the attorney of the claimants, the sum of \$250,000 to be paid by him to the traders and half-breeds of the See-see-toans and Wah-pay-toan Indians, according to the schedule attached to the “Traders' Paper” of July 23, 1851; and we further admit, and never have denied, but have placed the evidence of the fact upon the public records at Washington, that he did pay to Hugh Tyler \$70,000 to be distributed *pro rata* amongst the licensed traders of the Med-a-wa-kan-toan Indians, in accordance with their direction under the treaty of Mendota; but we deny that he paid either sum to Hugh Tyler contrary to law or treaty stipulations.

By what authority did Hugh Tyler receive these sums of money? We will proceed to show:

The traders and half-breeds, claimants under the treaty of Traverse des Sioux, executed to Hugh Tyler a power of attorney at Traverse des Sioux, on the 1st day of December, 1852, authorizing him to draw from Governor Ramsey, and receipt for the sums respectively due them, according to the distribution in the schedule to the “Traders' Paper” made by the chiefs of the See-se-toan and Wah-pay-toan bands of Sioux Indians, on the 23d of July, 1851. Mr. Tyler had been the agent and attorney of these claimants, ever since the negotiation of the treaties of 1851; but was specially empowered in this instance, as will be seen by reference to his power of attorney, marked “D,” on pages 28 and 29, of Sen. Doc. 29, part ii.

The next is a power of attorney from other claimants of the same fund, executed for a like purpose to Mr. Tyler, at Mendota, December 11, 1852, and found on pages 29 and 30 of the same document.

The third is a power of attorney from the licensed traders and claimants under the treaty of Mendota, of August 5, 1851, to Hugh Tyler, authorizing and empowering him to receive and receipt for the amounts due them, respectively, from the Med-ay-wa-kan-toan bands of Da-ko-ta Indians, and requesting Governor Ramsey to pay into his

hands the said sums. This paper is to be found on pages 35 and 36 of Sen. Doc. 29, part ii.

Upon the presentation of these powers of attorney to Governor Ramsey, accompanied by the proved accounts of the several claimants under both treaties, seeing that the several accounts were sworn to and that the sums due from these several bands of Indians to the claimants, in the aggregate amounted to more than double the sum they had agreed to receive in full satisfaction and acquittance of their indebtedness by the said Indians, he paid the sum of \$320,000 to Mr. Tyler. The receipts from Hugh Tyler, the agent and attorney for these claimants, to Governor Ramsey, are to be found on pages 31 and 36 of Sen. Doc. 29, part ii.

At the urgent solicitation of the upper chiefs, Governor Ramsey directed the following additional names to be made to the half-breed list, all of whom were related to the upper Indians, viz: Louis Anglin, Pierre Felix, for two children, and Pierre Rouillard, Le Gorle, Antonio Fresnier, John Moore, Wm. Altenburg, John Bt. Creech, Thomas Odell, and D. Farribault, for one child each; and as Mr. Tyler had no authority to add the names, Governor Ramsey reserved the right to direct this addition.

The above recited powers of attorney and requests of the chiefs establish the authority by which Mr. Tyler received the \$320,000; and a payment to their agent and attorney was a payment to the claimants. What arrangements Mr. Tyler saw proper to enter into with his clients is not a question to be discussed here, as he was not a party to this investigation, nor do his acts in any manner affect the conduct of Governor Ramsey. Yet the evidence, so far as the government saw fit to call out, shows that Mr. Tyler honorably and faithfully discharged the trust to his clients and employers.

The balance of the charges, that the money was divided among favorites, to the exclusion of meritorious creditors, and that but few, if any, received benefit from it except those who were connected with the fur company of Pierre Chouteau and others, has been fully answered before; but whether it has or has not been, so far as this investigation is concerned, is wholly immaterial. All that was necessary to be known by Governor Ramsey, or that it was his duty to inform him of, was that the amount of money claimed by these people was due to them from the Indians; that the money in his possession was intended for that purpose; and that Mr. Tyler was their properly authorized agent and attorney to receive and receipt for them. Of these facts Governor Ramsey was satisfied his judgment, and upon that judgment acted. If he erred, which we hold he did not, it was but an error in judgment, for which he is in nowise accountable, having acted in good faith.

In addition to the unquestionable propriety of this payment, Governor Ramsey was doubtlessly gratified at the relief granted him, by being enabled to pay the sum in bulk to their agent, instead of the trouble and annoyance it would have occasioned him to make distribution among so large a number of claimants. Thus have we met and refuted these two charges.

The sixth charge of Mr. Robertson is:

“That one Hugh Tyler was employed by the parties to this vi-

tion of law and treaty stipulations, as the visible go-between, agent, or borer; and that a large per centage was agreed to be paid or left in his hands, as a fee, from the fraudulent recipients of the Dakota money."

Whether this charge is or is not intended to embrace Governor Ramsey we are unadvised, either by the charge or the evidence; but, if it is so intended, we pronounce it entirely and unequivocally untrue, and deny that Governor Ramsey ever employed Hugh Tyler as a "go-between," "borer," or "agent," or that he was a party with Governor Ramsey to any violation of law or treaty stipulations, as alleged in the charge; and in this denial we are fully sustained by the record.

And as to the circumstance of the recipients of this money having agreed to pay Mr. Tyler a fee, either large or small, or whether it was to be paid by Mr. Tyler retaining a per centage in his hands or in some other manner, is a matter exclusively between Mr. Tyler and his clients, with which we have nothing to do, and one which should have received no notice from the commissioners, as it is to be presumed that these gentlemen had a right to enter into any arrangement or agreement they saw proper, either with Mr. Tyler or any other person. The concluding part of the charge, denominating the claimants "*fraudulent recipients*" of the Dakota money, is unworthy of serious notice, and has been fully answered under a former charge. This allegation, however, answers one purpose; it serves to show the spirit of malignity which induced the whole series of charges.

The third charge of Sweetser, and the fourth of Robertson, were left in part unanswered when the general allegations they contained were discussed. The parts to which attention is now desired to be directed are substantially this—the language and form being preserved in the substitute:

"That Governor Ramsey refused, though often and urgently requested, to pay the Sioux or Dakota Indians the money received by him under the treaties of Traverse des Sioux and Mendota."

These charges are both of a character so indefinite and general, that upon an analyzation of them they will be found to contain no charge against Governor Ramsey.

It is alleged that a demand was made and a refusal given; but it is not alleged that the *Sioux or Dakota Indians* ever made a demand, or that a demand was ever made upon Governor Ramsey, or that Governor Ramsey ever refused the Sioux or Dakota Indians their money.

Had we, therefore, insisted upon the exclusion of any testimony offered to prove a demand made by the Sioux or Dakota Indians, or that a demand was ever made upon Governor Ramsey, or that Governor Ramsey ever refused the Sioux or Dakota Indians their money, the commissioners would have been compelled, by every rule of law and every principle of justice, to exclude it. But there never was any desire on the part of Governor Ramsey, or his counsel, to exclude from the record any testimony that related to his action in, or his connexion with, this whole transaction. On the contrary, we were ever most anxious that the whole of the facts should appear, from the incipency of the negotiations, which resulted in these treaties, till the last dollar of the Sioux money left in the hands of Governor Ramsey.

Again and again did we claim the privilege of doing so as a right to which we were entitled both in law and justice; but as frequently were we wrongfully and unjustly denied by the commissioners. There is nothing in this matter but will bear the closest and strictest scrutiny, if the facts connected with it are permitted to be shown. But where, let it be asked, can there be found an instance of any transaction, made up of details and extending over months, that may not be made the subject of invidious comment, if isolated facts are given which need and require explanation, without affording the party an opportunity to make those explanations? That facts which were ready to be proved and could have been proved, necessary to a full and fair understanding of this case, were excluded by the commissioners, we boldly and unhesitatingly assert, and can prove before any tribunal where truth may be heard, or where justice is a governing principle. Crime does not so much consist in the doing of an act, as in the *motive* which induces it. Therefore, in all cases where crime is alleged, an opportunity should be afforded to the accused to show that, although he did the act, his motive was not evil. In this case charges have been made of acts done, which, if done with an evil or fraudulent intent, would constitute a crime of the highest penal character; and yet Governor Ramsey was uniformly prevented, when he attempted to show facts explanatory of his motive. Was this right? Was this just? Was it magnanimous? Can those who did it justify their conduct? If it was right—if it was magnanimous, and if it was justifiable, why exclude *offers* and overcome *objections* made by Governor Ramsey's counsel, and prevent their being placed on the record? There must, at least, have been doubts! If there were doubts, there is no justification; for the benefit of the party accused doubts should have gone to the advantage of the party accused.

But we have been led to make these comments, not because facts of a criminal character have been proved against Governor Ramsey—this we deny, and the testimony will support that denial—but because facts have been shown, which, if unexplained, might lead those who are strangers to the history of this transaction to infer a want of prudence or caution on the part of Governor Ramsey, when, had the explanations been received, as they should have been, no such inferences could possibly be drawn.

Some of the chiefs, both of the upper and lower bands, testify that they made demands upon Governor Ramsey for the payment of their money into their own hands. A few of them go further, and state that his refusal was conditional, and that the condition was that they should sign a paper or consent to the payment of their debts to their traders. Among the lower chiefs, they testify generally to the demands: one made by Wa-ba-shaw, and one by "Mah-pee-wee-tchas-tah," or "Clothes Man." We will first direct attention to the testimony of the demands alleged to have been made on the part of the See-see-toan and Wa-pa-toan chiefs.

It is admitted that "Red Iron," or Ma-za-sha," in the presence of "Limping Devil" and "Big Gun," and some of their young men, made a demand upon Governor Ramsey for the *whole* of their money, removing the fund and all. These are the only persons who were ever present when any demand of any character was made. Such is the proof. Besides

this, the demand was of such a character that it could have been complied with under no circumstances. And while we admit this demand, by this chief, made at no time in the presence of more than two other chiefs, we have the positive and uncontradicted testimony of *Dr. Thomas Foster, and others*, that a *large majority of the chiefs, present at the payment at Traverse des Sioux, were in favor of paying the money as it was paid, and as it appears to have been paid from the vouchers on file in the Indian office at Washington.*

In reference to the refusal of Governor Ramsey to pay the annuities, unless they signed a paper or paid their debts, it is simply an untruth. No such remark was ever made or thought of by Governor Ramsey; nor is it testified to by any person but Indians and half-breeds, while it is directly and fully contradicted by every white man who was said to be present when the refusals were made by Governor Ramsey. The interpreters, through whom it should have been made, deny with equal certainty that anything of the kind ever occurred in any council in which they were present, either as interpreters or spectators.

John Campbell, the half-breed youth, whose name has before occurred with unenviable notice, corroborates the chiefs, both of the upper and lower bands, in their statements that Governor Ramsey refused to pay them unless they would sign a paper, and that they refused to sign *a paper*, or pay their debts, until they *produced their books*. A simple reference to his testimony will be sufficient to convince any reasonable man that he knew nothing at all about the matter concerning which he was testifying. He was asked, in explanation, what he meant by "*a paper*" the Indians refused to sign. He says it was "the company's paper—Mr. Sibley's paper;" the *books*, he meant, were the "*company's books—Mr. Sibley's books.*" But his tale is denied, contradicted, and disproved *in toto*.

There were two demands proved to have been made by the lower bands. One was made by Mah-pee-wee-tchas-tah at Sibley's, and one by Wabashaw at the agency. The demand at Mendota was made by a single chief, and the demand was for the whole of their money, removal and subsistence fund and all. The demand made by Wabashaw at the agency was made not only for the treaty money, removal and subsistence fund, but for the old annuities and for the arrearages of their school fund. These demands Governor Ramsey had no authority to comply with. If he had done so, he would have been highly culpable.

But the chiefs state that he refused to pay them, or to release certain Indian prisoners then in Fort Snelling, until they would sign a paper or pay their debts, and name a number of persons who were present when he said this. These persons, including the interpreters named, both by the chiefs and John Campbell, have all, or nearly all, been upon the witness stand, and all positively deny that ever anything of the kind occurred in any council where they were present, and even one of the chiefs finally admits that it was not Governor Ramsey he heard say so, but some of the Indians. The statements made by these chiefs are wholly untrue, even as to the demand itself. The Indians confined in the fort were released by the agent, upon an agreement between himself and the agent of the Chippewas.—(See Watrous', Chippewa agent, affidavit.)

clause of the fourth article, (and in both treaties it is the same,) "to be paid to the chiefs of the said bands, to *enable* them to *settle their affairs* and to *comply* with their present *just engagements*," and in consideration of their removal to the homes set apart for them, &c., in such manner as the chiefs shall thereafter in open council request.

That allowance of \$275,000 is made for a purpose, and with an object. That purpose and that object is, to enable them to *settle their affairs*, and to comply with their present just engagement. What affairs have they to settle? What present just engagements have they to comply with?

In the construction of the articles of a treaty, as well as in the construction of the provisions of a statute, the causes which gave rise to the negotiation of the one, as well as those which induced the enactment of the other, must always be taken into consideration. The wants, necessities, and obligations of a people are the usual inducements to the enactment of a law; so, also, the wants, necessities, and obligations of a nation are the inducements that give rise to agreements and compacts between nations. In order, therefore, to arrive at the proper construction of the provisions of a treaty, where there is cause for doubt in consequence of ambiguities in the language of such provision, we must search for the causes which induced its incorporation and adoption. Nor can we ascertain those causes, or arrive at the true and equitable intent and meaning of treaty stipulations, without informing ourselves of the habits, customs, and pursuits of the contracting parties. When we have thus informed ourselves, we are prepared to go a step further. The cause may then be divined. When we have divined the cause, and informed ourselves of the habits or pursuits which produced it, we are then, and only then, prepared to examine into the intention, purpose, and object with and for which such people or nation entered into the compact. Having done this, we proceed to the examination of the provisions themselves, and place upon them such construction as their language will bear, always keeping in mind the cause or causes which gave rise to their adoption.

Let us direct our attention for a moment to the character, habits, and pursuits of the Sioux or Dakota Indians. But how are we to procure this information? As we procure a knowledge of the laws, customs, and pursuits of other nations with which we have intercourse—by their histories. The habits of this people are roving and uncivilized, their pursuits the chase. They engage in neither mechanical, nor agricultural, commercial, nor scientific pursuits. Yet they require food and apparel. The pursuits of the chase are inadequate to their wants. The proceeds from their hunts are barely sufficient to supply with necessities those who actually engage in them. The progress of the age, and the extension of the area of civilization, encroaches upon them. The homes of their fathers and the graves in which rest their dust have been overrun. They thus were brought in contact with civilization; and, while it has not tended to their improvement, it has served to teach them habits which were before unknown to them—habits of indulging in comforts and luxuries which are far beyond the reach of their ordinary means. To procure these things they must obtain credits. Those who trade among them will not give that credit to an in-

dividual of the nation, for as individuals they possess nothing. Their comforts and necessities, too, are equally desirable and necessary all. All things are in common; their lands are held in common they pledge their common faith as a people for the liquidation of credit they receive. Thus the nation becomes involved, the capital their creditors becomes exhausted, their traders are unable long furnish them with their necessary supplies, their wants cry out for relief, and they discuss the ways and means to supply it. They resort upon a plan. They will sell their lands. A treaty is negotiated a provision is embraced in it to this effect: "To the chiefs of said band (or nation,) to enable them to *settle their affairs*, and to *comply with present just engagements*, the United States agree to pay to the chiefs of said bands (or nation) the sum of \$250,000, in such manner as the chiefs shall hereafter in open council request." What must be the plain and manifest meaning, purpose, and intention of that language? There can be but one. That is, to enable them to pay their debts. What other affairs, what other engagements could be contracted by a people of their habits than obligations of indebtedness? That is the plain reading of the provision, it appears to us, no person can doubt who will for one moment glance at the circumstances of the people.

In addition to the palpable meaning of, and deductions from, the language of the treaties, it was the construction placed upon them by the Indians themselves until their minds were misguided and abused by artful and designing men. But how do we know that they so construed them? We know it from their actions, proof of which is to be found in the testimony of almost every witness that was upon the stand.

Immediately after the signing of the treaty of Mendota, the Menomonee paykootays showed the construction they placed upon the provision of that treaty, by executing to H. H. Sibley, and others, a paper giving *direction to the sum of \$90,000*, a part of the \$100,000 set apart, in the first clause of the fourth article of the treaty, "to enable them to settle their affairs and comply with their present just engagements" the remaining \$20,000 was to be reserved, and was reserved, to reside and subsist them. The affairs settled and the engagements met in them was the payment of the debts due to their traders.

The *Medaywakantoans* likewise assembled in council immediately after the treaty to make distribution among their licensed traders \$70,000, a part of the \$110,000 named in the first clause of the fourth article of their treaty, to enable them to settle their affairs and comply with their just engagements, &c. They met a second time, but previously determined upon the plan of distribution, and proceeded to name over their several traders, and determine upon the amount each was to receive. Having completed the list, it was discovered that the aggregate sum distributed amounted to more than double the amount at their disposal, and none of the chiefs being willing to lessen or reduce the amount he wished to be paid to his own particular trader the council adjourned without having consummated the object for which it was called, still they show their intention just as plainly as if the distribution had been perfected.

At Traverse des Sioux they meet in council after the treaty "Traders' Paper" have been signed, and distribute \$40,000 of

275,000 named in their treaty to enable them to settle their affairs and comply with their present just engagements to their half-breed relatives. Prior to this they had fully directed the traders to distribute among themselves, to suit themselves, as we have before fully and conclusively shown, the sum of \$210,000 taken from the same fund. These distributions gave direction to the whole fund named in both treaties, except the \$65,000 reserved for their removal and subsistence, and a sufficient direction was given to this by the circumstance of leaving it unappropriated, when their removal and subsistence was yet unprovided for directly.

Alexis Bailly testifies that the Medaywakantoans demanded of the commissioners that \$90,000 should be allowed in the treaty for debt.

James Wells testifies, that the Indians, during the negotiations of the treaty of Mendota, twice rejected propositions made to them by the commissioners as the basis of a treaty, because they contained no provisions for the payment of their debts to their traders.

Philander Prescott testifies that "he was interpreter at a council held at Mendota, in 1851, between the Indians and commissioners, when a provision of \$110,000 was made for the Medaywakantoans. It was intended, a *portion* of it for their traders and a portion for their removal and subsistence, and the *Indians so understood* it at the time."

It will be proper to remark here, that the portion of Mr. Prescott's, here quoted, is not upon the notes of evidence kept by the commissioners. They had taken it down, but on reflection erased it, as they did much other evidence of the same kind which was directly exculpatory of Governor Ramsey's conduct. Testimony of this character was most important to show the motive in Governor Ramsey's doings in the premises, but was always erased. The commissioners' notes and the notes of Governor Ramsey's council also differ in many important particulars. This arises from various reasons. In the first place the counsel took down *all* the witness said in explanation of some general remark. It was taken at once, and they did not want to see if the answer was either important or relevant, and then depend on memory for its correctness. In the second place, the *words* of the witness were used, and not *words* which it appeared would just do as well and meant the same thing. In the third place, much that has been erased from the commissioners' notes remain upon the face of the manuscript of the counsel, but generally with notes explanatory. But to return to the subject:

Mr. H. H. Sibley testifies that the Indians at Traverse des Sioux made a proposition of the amount they were willing to allow their traders—that the proposition was reduced to writing by himself, and was the *amount the commissioners were willing to allow, and the same amount that was subsequently embraced in the treaty.* That the *Med-ay-wah-kan-tonns*, at the time of the treaty at Mendota, *understood and intended the \$90,000 for the payment of their debts, and frequently so expressed themselves* to him, *up till within a short period of the payment*; that something was said about it being in the treaty; and the \$90,000, referred to by them, *was set apart out of the \$110,000 named in the treaty, for the payment of their debts.*

Dr. THOMAS FOSTER, the secretary of the commission, testified that he was present during the negotiation of both the treaty Traverse des Sioux and Mendota; that he was also at the payment Traverse des Sioux; that at both places, the *acknowledgment of debts* by the Indians to their traders was made in the presence of the commissioners, as was likewise their agreement to pay that indebtedness; and that at the time of the payment *he heard a large number of the chiefs present express their desire to pay their debts to them in the manner they were paid by Governor Ramsey.*

Franklin Steel testifies that he heard a number of the chiefs Mendota and Traverse, give directions to Governor Ramsey to pay their traders in open council; and that he heard others say that they had given such directions, as No-ghu-po-tan, Wah-ah-noh-tah, Sleep and others.

Thus, from the testimony of witnesses called by the government as well as by those called by Governor Ramsey, the position is well sustained, and indisputably sustained, that the several funds paid out by Governor Ramsey were paid according to the construction the Indians put upon their treaties, and according to their unanimous wish and intention at the time of those treaties, as well as subsequently to the payment up till within a short time of the payment. Why there was a change of intention at the period it was first manifested, we think has been conclusively shown, from the contemporaneous circumstances. And we feel thoroughly convinced that, had it not been for the bad advisers and prompters they found in the white men, who sought to get possession of their funds, they would never have been dissatisfied; and an idea that any wrong was done or fraud perpetrated in the whole transaction, would never have been entertained for a single moment by any man.

We will quote a few more statements of witnesses, for the purpose of allaying the doubts of those who may be more sceptical than are generally presumed to be.

MARTIN McLEOD's testimony is: *That from the first, the Indians intended for incorporating in their treaties a provision expressly for the payment of their debts; that the upper Indians said they knew their debts were more than the commissioners would be willing to allow, showing that the commissioners were fully aware of the object of that provision, and that the Indians intended it for the payment of their debts.*

JOSEPH R. BROWN testifies: That the traders were frequently called by the Indians with propositions for the consideration of the commissioners; that the last one made through the traders to them was that the Indians would sign the treaty of Traverse des Sioux, if the government paid \$50,000 cash annuities; \$400,000 for their traders and half-breeds (\$300,000 to go to the traders and \$100,000 to the half-breeds); and \$25,000 for removal and subsistence; that the commissioners considered and proposed in return \$40,000 cash annuities; \$250,000 for the traders and half-breeds; and \$25,000 for removal and subsistence; that the Indians agreed to this, and directed the traders to divide the \$40,000 among themselves, and that they would divide the \$40,000 among their half-breeds—both of which were done on the same day as the treaty; that the "Orphan" and "Sleepy Eyes" both

speeches in the council, referring distinctly to the provision they had just made for the payment of their traders; and these allusions had reference to either the treaty or the "Traders' Paper," to which one of the two, or whether to both, is entirely immaterial.

Rev. S. R. Riggs testifies, upon his cross-examination by the commissioners, that he was one of the interpreters at the treaty; that the Indians were uniformly given to understand, at the time of the treaty, and did understand that the \$275,000 mentioned in the treaty—less the amount sufficient for their removal and subsistence—was for the benefit of the traders and half-breeds alone, and that they (Indians) had no further control over it; and that it was subsequently paid by Governor Ramsey, according to the common understanding of the treaty at the time it was made.

Mr. Riggs is a minister of the gospel; has resided long among these Indians; is a man of superior intelligence; writes, speaks, and understands the Dakota, and therefore fully qualified in every respect to speak understandingly relative to these matters, so far as they come under his observation. But it may be asked, why does his testimony stand isolated and alone in regard to these facts which he has stated? That question is easily answered. We were at all times anxious to prove the whole of the facts connected with these treaties and payments, that had a tendency to elucidate them, but were uniformly excluded from giving any testimony of the negotiations between chiefs, commissioners, and traders, that referred to the treaties or any of their provisions. There was not a single witness whom we supposed to be acquainted with facts similar to those proved by Mr. Riggs, that we did not attempt to show these things by, but were not permitted. We could have proved the same facts by at least a dozen witnesses of unquestionable veracity. We offered to do so. Our offers were overruled, and not even a note made of the offer or exclusion. This was wrong as to the ruling, and unjust and unfair towards Governor Ramsey, because it deprived him of material facts, and left an unfavorable inference; and, finally, calling out the same testimony from the next to the last witness who was to be examined, strengthened the inference that we could not prove it by any of the other witnesses, or we would have done so.

We make this statement in this connexion, as the only means left us of bringing a knowledge of these facts to those who may have to examine the testimony taken by the commissioners, and do it for the purpose of explaining what otherwise might appear singular.

In reviewing these last charges, we have rather directed attention to the testimony than to the charges, and think we have sustained our position by the evidence in all cases; and although a demand is admitted to have been made by "Red Iron" and "Limping Devil" above, and by "Wabashaw" and "Cloud Man" below, yet we have clearly shown that Governor Ramsey never made the signing of receipts or vouchers, or the payment of the Indians' debts to their traders, a condition to the payment of annuities or the release of the prisoners in Fort Snelling.

With the same certainty it has been shown that the interpretation and construction of the first clause of the fourth article in both treaties,

made by Me-day-wa-kan-toans upon Governor Ramsey, for the payment of the money due under the treaty into their own hands, and the only instance which it is even pretended amounted to a demand, "Wabashaw" alone desired the money to be so paid, *while a full majority of the whole seven bands* asked that it might *be paid to the traders*, in satisfaction of their debts. This was done in open council, where six out of the seven chiefs were present; and was in itself a full direction to Governor Ramsey as to the manner in which they desired the money to be paid. Had he seen proper, therefore, he might, without either blame or censure, have taken this as a final direction, and gone on and paid out the money under it. But, although the direction to pay the \$70,000 was unequivocal, he had no desire to receive it as an expression of the whole of the bands, but wished them not only to be satisfied but unanimous in their request. Therefore, after the speakers had concluded, and he had declined to comply with the demand of "Wabashaw," he told them, that under no circumstances could he pay them the whole of their money unless he should receive other instructions from their Great Father at Washington; that if they did not agree and direct him to pay the money according to the evident intention, and for the purpose expressed in their treaty, he would be obliged to carry it back again to their Great Father. He told them, as there was division and disagreement among themselves, relative to the manner in which their money should be paid, to get together and endeavor to come to some distinct and united understanding in regard to it; that as honest men they ought not to try and divert that money from the purpose for which it was given to them, but ought to pay their just debts, which they so often admitted, and knew to be justly due; that he would advise them to pay \$70,000 to their traders; divide \$20,000 among their half-breed relatives, and direct him to retain the remaining \$20,000 for their removal and subsistence; that this would be acting like honest men ought to act, and he would, therefore, adjourn the council in the hope that they would soon come to some positive agreement and understanding among themselves. This was the last time any demand was made for the hand money due them under the treaty. Subsequently, however, on the evening that "Wabashaw" and "Wakootay" sent for him to come, that they might sign a receipt and directions for the \$90,000, "Wabashaw" asked him for their proportion of the removal and subsistence fund. He replied to him, that he would pay them their proportion of the \$20,000 to be distributed by them among their half-breeds, but that he could not pay them the other. He then asked them for what purpose they had sent for him, and if they had come to any understanding in regard to the payment of the \$70,000 to their traders? They told him they wished to consult further between themselves first. After an hour or more of consultation among themselves and their head-men and braves, they sent for him, told him they had determined to sign the receipt for \$90,000, out of which they desired him to pay \$70,000 to their traders, and \$20,000 to the chiefs. He replied he would do it, and they signed the voucher directing him to pay him out accordingly. But the signing of the receipts will be dwelt upon hereafter under their appropriate head, when we come to consider those from the upper as well as the lower bands.

The circumstances recited in connexion with the demands made upon Governor Ramsey by "Wabashaw" and "Wakootay," that the money be paid into their own hands on the one part, and the request made by "Good Road," "Bad Hail," "Medicine Bottle," and "Little Six's brothers," that it be paid to the traders on the other, are all proof in the testimony of Prescott, Forbes, and Faribault, interpreter and Steel, Sibley, McLean, and others, who were present in the councils.

But it may be said that Governor Ramsey should have paid the money into their own hands at once, and upon the first demand by any of the chiefs. Such a position is easily refuted, for, under no circumstances, could he have done so without a palpable violation of the plainest provision of the treaty.

We hold, and we hold rightly, that had even a majority of the chiefs made this demand, or had the demand been unanimous, Governor Ramsey would have been guilty of highly improper conduct had he complied with such demand. It has never been pretended that he did wrong in retaining the \$20,000 removal and subsistence fund; on the contrary it has been made the subject of a distinct charge, that he did not retain enough. By what right, authority, construction, or process of reasoning, could he have retained and appropriated the removal and subsistence fund, and been obliged to pay the remaining \$90,000 of the lower bands, and \$250,000 of the upper, into the hands of the Indians? The fund under both treaties is a unit. The language allowing it and expressing the objects for which the allowance was made is identical, and it is the same in both treaties. There is no distinction made in the act of Congress by which it was appropriated. The whole fund remained a unit until the action of the chiefs ended it; one part of it being left by the treaties just as subject to the subsequent direction of the chiefs as the other; both to be paid to the chiefs as they shall thereafter in open council direct. Then will it be asked, would he be obliged or authorized to retain one part of the funds, a unit in itself, appropriated by the same language in the same provision of the treaties, and *obliged* to pay out the other without the direction, or in the absence of the chiefs?

By what rule of law, or by what rule of justice, equity, or common sense, can two antagonistic obligations, equally binding, be created by the same provision and the same language of the same treaty? So to allege is simply ridiculous.

But it may be said that, as superintendent of Indian affairs, it was his duty to see that the Indians removed and subsisted themselves upon this fund, and without any further cost or expense to the United States. This position would be well taken. It was his duty to do so. But does that change or alter, or affect the true intent and meaning of the treaties? Unquestionably not. Then why, if it does not affect the rule of construction, would he have been culpable had he not retained the removal and subsistence fund, if it was obligatory upon him to pay the balance into the hands of the Indians? His duty as superintendent not affecting the construction of the provision, we confess our inability to make the distinction.

From a perusal of the treaties, as well as from the incidents which may be said to have been a part of the negotiations of those treaties

the object and purpose of the allowance of the \$275,000 in the one case, and of the \$110,000 in the other, must be abundantly manifest. That they must be construed to mean for the payment of their debts, as well as for their removal and subsistence, must be equally evident. But how are we to overcome that other clause, "to be paid as the chiefs shall in open council request? The intention and purpose of the provisions are plain; but the manner of applying the fund to those purposes is the stumbling block.

As superintendent of Indian affairs, Governor Ramsey was presumed to know—what it was his duty to know—the wants, habits, and characteristics of the Indians. He calls together the Indians, after his return with the money, for the purpose of counselling with them in regard to the manner in which the money is to be disbursed. They meet in council. He explains to them what he understands to be the true intent and meaning of the 1st clause of the 4th article of their treaties: that the \$250,000 in the one case, and the \$110,000 in the other case, therein named, is intended for the payment of their debts to their traders, and for their removal and subsistence. He is met on the very threshold by a demand from "Red Iron," party to the one treaty, and "Cloud Man" of the other, for the whole of their money, that they may do with it as they pleased. What inference is deducible from this demand after the explanations they have received? What information does it convey to the mind of Governor Ramsey? The inference is irresistible that they wish to divert the fund from its legitimate purpose, and the demand itself is sufficient evidence to bring that knowledge home to Governor Ramsey.

Knowing their character and habits, he is, by that knowledge, aware of the fact, that if the money was paid into their hands, every dollar of it would be uselessly and foolishly expended and squandered. Under these circumstances, what is it his duty to do? To pay it to them, and thus aid them in defeating the objects of their treaties? Certainly not! Is it his duty to afford them the certain and inevitable means of violating their most solemn pledges—the violation of their national faith? No! as a faithful officer and as an upright man, he is bound to refuse compliance to their demand. But this brings us back to the same difficulty: By what authority did he refuse? He refused, firstly, from the construction he put upon the treaty in connexion with what he conceived to be his duty as superintendent of Indian affairs; and, secondly, on the authority of his letter of instructions from the Indian office, at Washington. See Senate Document 29, part ii, pages 12 and 13, which is as follows:

"Familiar as you are with the provisions of these treaties, it is unnecessary to give you detailed instructions in regard to the funds now placed in your hands. Had the treaties been ratified as originally made, the removal of the Indians to the reservations provided for them would have been required as a condition precedent to the payment of said funds; but the delay occasioned by the amendments of the Senate, and the consequently suffering condition of the Indians, *in connexion with other interests involved*, may render it expedient to dispense, in some measure, with this condition, and to *pay out a portion* of the funds in advance of the entire removal of the Indians. You will be governed

by a sound discretion in regard to this matter, taking care to provide effectually for their removal during the next year, and for their subsistence as contemplated by the treaties. The subsistence and presents furnished the Indians while you were engaged in obtaining their assent to the amendments of the Senate, may, as you suggest, be paid out of the funds provided for the first year's subsistence."

This letter does not merely leave this matter to the discretion of Governor Ramsey, but it actually puts a construction on the treaties for his guidance. The reference made to "*other interests involved*" was clearly intended to be understood as directing Governor Ramsey's attention to the settlement of the affairs and the compliance with the just engagements of the Indians; their engagements to those with whom they traded, and to whom he knew them to have obligated themselves from the language of the treaties. What is to be implied from the phrase "just engagements," when used in connexion with the allowance of money? Does it not imply a moneyed obligation, and is it equivalent to "pay?" The word "pay" is always associated with "debt;" hence the conclusion in this matter, that the word "engagements" was used as the synonym of "debts."

Under these circumstances to which the commissioner reverts in his letter of instructions, he says they "may render it expedient to dispense in *some measure* with the condition precedent to the payment of such funds." This condition is embraced in the provisions of the treaties and is just as obligatory as any part or portion of them; and yet, under the construction given to it by the government, that "may be in *some measure* dispensed with." Thus clearly and pointedly indicating to Governor Ramsey that an equitable, and not a strictly literal construction, in any event, should be placed upon these treaties.

Then again, he charges him to be careful "*to provide effectually for their removal next year, and their subsistence as contemplated by the treaties.*" What provision does the commissioner intend shall be made to insure the removal and subsistence of these Indians? He evidently would not, in order "*to provide effectually*" for these objects, desire that money should be paid into the hands of the Indians. It must then be that he intended that Governor Ramsey should retain a sufficient sum for these objects, and that he should use a sound discretion in doing so, and that such a course was "*contemplated by the treaties.*" But there is still another clause of this letter, which does not depend upon influences, and in which the language is neither uncertain or equivocal. He is *ordered* to pay, out of the removal and subsistence fund, for subsistence and presents given to the Indians while assembled for the purpose of obtaining their assent to the amendments of the Senate. Here is a positive direction. He is to pay a part of this fund, not into the hands of the chiefs—not to the chiefs as they shall in open court request, in accordance with the strict letter of the treaties, but for supplies and presents furnished them while engaged in getting their assent to the amendments. This is to be paid out of the removal fund, not to the Indians, but to those who supplied the articles presented to them.

What is to be inferred from these positive instructions? Is it that these moneys are to be disbursed, not according to the strict

ter—that is, paying the money *to* the chiefs, if they so request, but the true and equitable meaning and spirit of the provisions of those treaties? Such is our construction, and we think such must be the construction and inference of all who examine the contents of this letter. We do not, however, rely upon this position, or upon this letter of instructions, positive as it is in terms, although there can be no question of their propriety; but we do rely upon the construction of the treaty itself taken in conjunction with Governor Ramsey's duties and obligations as superintendent of Indian affairs.

Let us then recur to the view slightly alluded to before quoting the letter of Mr. Commissioner Lea. We held that the fact of a demand being made was sufficient evidence to Governor Ramsey, that the Indians intended to divert the fund from what he considered was its legitimate purpose. We hold so still, and also hold that possessing such knowledge, it was obligatory upon him to *retain the funds* intended to be diverted in his own possession, if not, to disburse them. But as superintendent of Indian affairs, he was, to all intents and purposes, their guardian, and is so recognized by the laws of the land, and they his wards. As the guardian of these people, he was necessarily informed of their wants, necessities, and engagements. The treaties made by these wards with the government of the United States contained provisions in which were named specific sums of money, intended to be appropriated for certain purposes. Knowing that the money would be squandered if paid into their hands, and the objects of the treaties defeated, was he not bound, as their guardian, to prevent, if within his power to do so, the useless and objectless waste of these funds, and to see them appropriated to the purpose for which they were embraced in the treaties? This duty was just as obligatory upon him, as if he had been the proper legally appointed guardian of a minor, to whom had been left a legacy for a specific purpose, to see that it was appropriated to the object intended by the testator. The rule that would govern in the case supposed, would be his proper rule of action in all matters of a similar analagous character, in his relations with the Indians. Such is the law, and such is the duty imposed upon all those who hold such relation to others. But Governor Ramsey held to these Indians a two-fold relation; he was both guardian and trustee, and as such, no matter how he obtained his information, that the Indians would misappropriate their money if paid to them, it was his duty to withhold it from them.

His duty, likewise, to the government, whose agent he was, as superintendent, required him to see that its interests were not prejudiced; and, therefore, he was obliged to withhold from their hands, at least, a sufficient amount to provide effectually for the removal of the Indians, and their subsistence for one year. The Indians were to remove, and subsist themselves, without any further cost or expense to the United States—and if he had paid this money into their hands, not one dollar of it would have been applied to that purpose. This was the view of Governor Ramsey, and such is the testimony of every white witness *but one*, who has been before the investigating commissioners; and this single exception was brought here *from the Missouri* to testify to that fact, and also to the fact, that the Indians were not only truthful men, but

more so than white men!! Governor Ramsey was therefore bound to refuse compliance with the demand of the three or four chiefs who wished the money paid to them to expend as they pleased. Had he done otherwise than refuse, he would have failed in his duty to the government, whose agent he was; he would have failed in his duty to the Indians, whose guardian he was; and he would have failed in his duty to the creditors of the Indians, who had lent their aid to the government in the negotiations of these treaties—without whose influence no treaties could have been made, and for whose benefit, mainly, sums of money were allowed in the treaties. These facts were known to him. He was one of the commissioners, and the Commissioner of Indian Affairs instructed him to be governed by that knowledge. What else could he mean by using the language "*Familiar as you are with the provisions of these treaties, it is unnecessary to give you detailed instructions &c.*" It could mean but one thing—that, as he had been conversant with the intentions of those provisions, and the funds placed at his hands were to carry out those intentions. He did carry them out, and, in doing so, performed his duty. Had he done otherwise, it would have been a gross violation, for which he would have deserved the severest censure.

There is still another reason why he was obliged to do as he did. The "imperative necessities of the Indians required it." It was his duty, in consequence of the relations he held to the Indians, to watch over their welfare, and provide for their necessities. Had he not done so, the difficulties which divided their councils, and the dangers which threatened, if so large an amount of money was placed in their hands, fighting and bloodshed would have been the result; and this is the testimony of a number of witnesses, who have long resided among the Indians, and who are familiar with all their habits. But it may be objected that the manner of payment in cases of this kind, or under circumstances of this character requires the direction of the President. This is an error. It is the duty of the superintendent, and he is the official in control of matters of this kind. The act of August 30, 1852, does not embrace payments of this kind. This forms one of the exceptions named in that act, and excluded from its general operation. The act contemplates none but payments *per capita*, and excludes all other payments. Where, by treaty stipulation, money is to be paid in bulk, or to chiefs. Payment to the chiefs is not payment *per capita*; payment *per capita* means payment to each individual of the band or nation.

Besides this it has always been, and is yet, the policy of the government not to pay large sums of money directly to the Indians; and no such provisions are ever made, either by treaty or otherwise, by which large sums are paid to them. Hence they are paid annuities, and the principal, in all cases of the sales of their lands, is held in trust for the benefit of the Indians. For this reason, had it been thought for a moment that the large amount named in the treaties of Traverse des Sioux and Mendota, to be paid in cash, upon the ratification of those treaties to the Indians themselves, they would never have been ratified by the Senate or confirmed by the President. It was this policy which gave rise to the enactment of the law requiring all payments to be made *per capita*, unless otherwise provided by the stipulations of treaties, &c.

This policy guided the commissioners in the negotiation of these treaties, and leaves their construction beyond question. Had it been intended that these large sums were to be paid directly to the Indians, they would either have provided for *per capita* payments, or been quiet altogether upon that subject, leaving it to be settled by law or by the regulations of the proper department.

We will now proceed to the consideration of the next charge, which, in its compass, embraces all those that have been before considered. It is:

“Governor Ramsey stands charged with paying out the Sioux moneys in violation of law and treaty stipulations.”

This is the general concluding clause of every separate charge, and general as it is, it is but little more so than those which precede it. From what has already been said, we feel that it is scarcely necessary to reply further to this charge; but as no specifications accompany it, perhaps it may be as well briefly to show a performance of those facts which fully sustain our general denial of the charge.

And we premise the showing of these facts by asserting, fearless of contradiction, that there never has been an Indian treaty or a consequent Indian payment of any considerable sum of money, made on the part of the United States with any tribe or nation of Indians, the propriety of which is less questionable than the treaties and payments which gave rise to these charges. And we further assert, and assert it boldly before the world, and in the face of those who preferred these charges and who pledged their honors to sustain them in every particular, that a series of more false and wanton charges were never before placed upon the records of any department of this government. We challenge the production of a single sentence of testimony that remains uncontradicted on the record of the commissioners, to sustain a single material point or allegation contained in these two series of charges, except such facts as we have always admitted relative to the informal demands made by “Red Iron” and “Limping Devil” above, and “Wabashaw” and “Wakoota” below, and that a portion of the money received from the government was placed on deposit in safe and solvent banks in New York, and checked upon for a small amount of bank notes or paper. These are unimportant facts, as we think will be abundantly shown before we have done with the consideration of these charges. We repeat it, that not one fact has been proved material to the points made in the charges against Governor Ramsey, unless it was by the testimony of either Indians or uneducated half-breeds, who have been contradicted in every important statement made by them. And here we may as well say a word or two in regard to Indian veracity and Indian testimony.

Necessity, and that, too, of the sternest character, could only have induced our national law-makers, as well as those of many of the States and Territories, to enact laws making Indians competent witnesses to prove certain specified offences. By an act of Congress of March 3, 1847, (see L. & B.’s edition of Stat. at Large, vol. 9, page 203,) it is provided that Indians may be witnesses to prove the sale of spirituous or vinous liquors to Indians, or their introduction into the Indian territory. The statutes of Minnesota (see Rev. Stat., page 131,) contains a similar provision. These are the only instances in which Indians are

competent witnesses for any purpose. Their exclusion must have been induced by some overwhelming cause—must have been induced by some important and unquestionable reason. Had not this been the case, objections would have gone to their credibility, and not to their competency. But such is the character of Indian testimony, well is it understood by all who are at all familiar with their character, that our law-makers wisely excluded them altogether from the witness stand, except in the instances specified, knowing that the evil would result from their total exclusion than to depend upon the statements of a class of persons whose leading characteristic is to lie. The necessity that induced the exceptions named was, the almost utter impossibility of proving offences by others than Indians, and were of such a flagrant character as to cause a departure from the general rule which common sense had induced.

It will not be inappropriate, in this connexion, to state that induced by a knowledge of this characteristic in Indians, upon the introduction as witnesses in this investigation, we entered, and a protest was filed, our solemn protest against the examination of Indian witnesses.

That protest was based upon several grounds: their incompetency as witnesses in all cases except those provided by law; their want of veracity, a knowledge of this fact being in the possession of the commissioners, &c. We likewise protested against the manner in which they were examined, and the form of the oath administered to them; and we still hold, as we then held, that after the answer given by the chiefs in their preliminary examination, the commissioners greatly erred in the form of the oath. The chiefs said the form considered by them most obligatory upon them to speak the truth was an appeal to the Great Spirit. Notwithstanding this, such form was adopted. The chiefs said, however, that they would consider themselves bound to tell the truth if sworn upon "*the book*," as when they were sworn. The commissioners held this to be sufficient; but they did not even swear them upon *the book*, but adopted, for convenience, another form, and they were qualified by the "*uplifted hand*." The commissioners held, and said that the form of oath usually administered to civilized men and Christians was, in form, sufficient to bind an Indian according to their customs, as stated upon their protest.

Although we place no reliance upon Indian testimony, and feel fully satisfied that no man should, or that any reasonable man will, after the proof in this case, yet we do hold that when they were put forward as witnesses all the forms should have been strictly complied with. These were not complied with, and witnesses, whose want of veracity was well known to the commissioners, instead of having every precaution taken, and every possible guard thrown around them to induce them to speak truly, were not even qualified with the usual solemnity of the qualification of men whose veracity is unquestioned. Why this was not done we are unable to know; but one thing we know, that every argument was used by Governor Ramsey's counsel to induce them to adopt the most obligatory forms suggested by the Indians themselves and those familiar with Indian customs.

is another thing we do know, and here assert, that upon the administration of the oath there was a half-suppressed laugh of derision and contempt from the crowd of chiefs and braves present at the idea of the form of the oath adopted.

Even against and in the face of our protest, the commissioners refused to examine the different chiefs separately and apart from the rest and their bands, when it was in proof that the Indians considered the one who first spoke or first acted in reference to any matter the author of the thing to be attained, and followed him, regardless of truth or anything else. There was another reason also in proof, that it was as much as a chief's life was worth to speak the truth openly in the presence of his band or others of the tribe, if his words were in conflict with their wishes and sentiments.

The reason assigned by the commissioners for refusing to comply with our request, and exclude all Indians except the witness under examination, was, that as all their acts in regard to signing acknowledgments of indebtedness and engagements to pay, the signing of all powers of attorney, receipts, and vouchers, as well as their demands upon Governor Ramsey, were done in a national or tribal capacity, therefore they must be sworn and examined in the same capacity in open council before the commissioners.

We confess the rule laid down was to us a novel one, and gave birth to a new idea and new principle in American jurisprudence. Had this been before a judicial tribunal where perjury would have been consequent upon falsehood, an indictment would have presented the novel case of a nation arraigned for perjury.

The "STAR" testified, that he had received one-seventh, or a chief's dividend of the \$20,000, set apart to be distributed among the Medawakantoan chiefs; when the truth is, he was not paid at all by Governor Ramsey, nor was he entitled to be paid, or even held to be. But the other chiefs had each sworn that they had received their proportion of this fund, and he, according to their general custom followed them in everything and swore to it likewise. "*Grey Iron*," when sworn, said his son, "Little Crow" had been asked a great many questions and he intended to say just what Crow had said. These things account for the uniformity of the falsehoods contained in the Indian testimony, which, were it unaccounted for, might give it the appearance of truth.

In addition to these things it is a fact well understood and susceptible of proof, that Indians, half-breeds, and traders had been told, that if the charges were sustained against Governor Ramsey, the whole of this money would be re-appropriated and paid over. As far as this relates to the Indians, it was incorporated in our protest, and also the fact, that such impression was left upon their minds by conversations or talks held with his excellency Governor Gorman himself; we do not intend, however, to be understood, as intimating that his excellency sought so to impress them; yet the fact that his talks did so, is, nevertheless, true.

It is in evidence by the testimony of every white man, who was called as a witness, with one exception, and who were familiar from long intercourse with Indian character, that as a general thing no reliance could be placed upon Indian testimony, and the exceptions to this rule were exceedingly rare. They also stated that they would not be-

lieve them in any matter in which they had either feeling, interest, or were conceived themselves to be interested, and that it would make no difference as to the truthfulness of their statement whether they were sworn or not.

This is the character of the testimony brought before the commissioners to sustain their wanton and groundless charges against Governor Ramsey; testimony, which every respectable man, who was upon the witness stand, swore was unworthy of reliance; and which the common sense of the land exclude in all cases, except where necessity alone calls for its admission, and even then it is only received by special caution. It has also been shown that the testimony of uneducated half-breeds is equally unworthy of belief, and without such testimony, all of which has been contradicted, there is not a sentence upon the record which impeaches the conduct and actions of Governor Ramsey.

We will now recur to the authority upon which Governor Ramsey made the disbursements and distribution of the Sioux moneys in his hands by the government, in as brief a manner as possible.

Commencing with the treaty of Traverse des Sioux, we have shown conclusively the construction placed upon the first of the fourth article, which alludes to the uses for which the \$275,000 was allowed. We had done the same in regard to the treaty of Mendota. We have shown that the Indians themselves placed the same construction upon those treaties, and for months acted in accordance with the view of carrying out the true intent, meaning, and spirit of the provisions they contained. We have proved that the chief headmen of the *See-se-toan* and *Wah-pay-toan* bands, executed at Traverse des Sioux, in the same council in which they signed the treaty, and have shown that by their subsequent acts, in relation to that paper, they not only gave a construction to the treaty and a sanction to the fund, but that they confirmed the execution of the "Treaty Paper" itself.

We have proved that the *Medawakantoans* gave the same sanction to the treaty of Mendota by their concurrent and subsequent acts, and that in open council, at the St. Peter's agency, requested Governor Ramsey to pay the money as it was paid; that this request was carried by a full majority of the chiefs through their representatives. We have shown that the *Wah-pay-koo-tas* gave the same construction to the treaty of Mendota and acted under it; paid the \$90,000 to their agents voluntarily, and remain satisfied with what they did. It may be remarked, that the *Wah-pay-koo-tas* live at a distance, and were therefore, not within the influences which operated upon the other bands. That these things alone were sufficient to authorize Governor Ramsey to disburse the Sioux moneys as he did, there can be no question. We are anxious to have a unanimous expression of the wishes of those bands, and for the purpose of having a more convenient and formal vote, he obtained from all the chiefs of the *See-se-toan* and *Wah-pay-toan* bands present at the payment of Traverse des Sioux, but "Red Jacket" and the "Big Gun," a receipt or voucher for \$250,000, containing a direct and positive request to pay that sum according to the distribution made by them at the time of the treaty, thus reaffirming all the previous acts. "Oo-pe-yah-en-dag-yah" or "Big Curly" not hav-

present at the payment, subsequently goes to the Rev. Mr. Riggs and voluntarily requests him to prepare a voucher or assent to the payment made by Governor Ramsey of the \$250,000, stating at the same time, that one of his principal men had been at the payment, and would have signed the voucher there signed by the other chiefs, but was prevented from doing so by "Red Iron" and his "soldiers' lodge."

The chiefs of the Me-da-wa-kan-toan bands signed a like voucher, directing him to pay to their licensed traders \$70,000, and divide \$20,000 among the seven chiefs. Thus was his full, complete, perfect, and, but for the two recusant chiefs, would have been the unanimous expression of the whole of the bands, interested in, and parties to, these treaties.

We will now examine the receipts themselves, and the manner in which they were obtained.

The receipt and direction to disburse from the See-se-toan and Wah-pay-toan bands to Governor Ramsey, is found on page 7 of Senate Doc. 29, part ii. It is signed by eight chiefs, viz: "E. Tai-wah-keorn," "Wah-nah-k'soon-tah," "Waa-na-ta," "No-rop-ton," "Wam-du-pi-du-ta," "In-tue-book-ar-dan," or "Young Sleepy Eyes," "O-tak-e-ta," "Hoo-pah-in-a-peh-don-tah," or "M-ke-pah."

It appears in evidence that this voucher was not signed by all these chiefs at the same time and in the same council. This is true; but we hold the reason why this was so is sufficiently explained by the attendant circumstances. The testimony of the Rev. Dr. Williamson, Rev. Mr. Riggs, Hon. H. H. Sibley, Dr. Foster, Captain Monroe, Messrs. Dousman, Bailly, Steel, McLeod, Farribault, and others, shows that the chiefs were prevented from going into general council by *Red Iron* and *his soldiers' lodge*; hence it was wholly impracticable to obtain their signatures at the same time. That these chiefs were so deterred, and had good reason to be, is abundantly evidenced by the treatment of "Young Sleepy Eyes" by this hostile chief, "Red Iron," and his unruly and belligerent band.

The statement of "Big Curly" also shows that this was the reason; and that one of his principal men would have signed the voucher, but was prevented by the soldiers. That this was the cause there can be no doubt, and it is proved by the testimony of the chiefs themselves.

The Rev. Dr. Williamson and Mr. Joseph R. Brown, the two best informed men in the country upon the subject of the chieftainship and government of the Sioux and Dakota Indians, having lived among them for nearly a quarter of a century, testify certainly to eleven chiefs, at the head of, and recognized by, as many bands, among the "See-se-toan" and "Wah-pay-toan" Sioux, and say that there may be more; but these they know, and know that their names are upon the agent's rolls at the new agency at Red Wood, on the Upper Minnesota. They are as follows:

"*En-yomg-mah-nce*," or Running Walker, called "Big Gun" by the whites.

"*Wee-tchan-h'pee-ee-tay-toan*," or Star Face; more generally known as the "Orphan."

"*E-tay-wah-kee'n-yan*," or Face of Thunder; ordinarily named "Limping Devil."

"*Esh-tah-hum-ba-hoash-kah*," or "Young Sleepy Eyes;" sometimes written "*Esh-tah-hum-bah-hoak-shee-dorn*."

"*Oo-pee-yuh-ken-dag-ah*," or Extending his Train; known whites as "Big Curly."

"*Wah-nah-k'soon-tay*," or the Walnut; known, however, "Little Rapids Chief."

"*Mah-zah-sha*," or Sounding Metal; commonly translated Iron."

"*No-gho-p'tan*," or *Nor-opt-on*; sometimes written *Nor-hope-t* "Listener."

"*Wah-ah-nah-ta*," or *Waa-na-ta*; by some called "Young W ta," to distinguish him from a celebrated chief of the same name father.

"*Hoo-pah-Een-k'pah-Doo-tah*, or "Ink-pah."

"*O-tah-k'tay*," or Plenty Killer, now dead, but living at the time of the payment and treaty. He is succeeded by his brother.

The above chiefs are all recognized; have large bands on the rolls; and have been at the head of those bands, with the exception of two, for years. The exceptions are "Red Iron" and "Young Sleepy Eyes," both of whom were first recognized as chiefs by the commissioners at the time of the treaty of Traverse des Sioux, 1851.

Some attempts were made before the commissioners to attack the orthodoxy of Mr. Williamson and Mr. Brown's statement in regard to the chieftainship of "*Waa-na-ta*;" but the proof upon the subject was so conclusive that *Waa-na-ta* was a chief as early as Doty's treaty in 1847, and that he has been at the head of a band of over 400 ever since the death of his father—one of the largest bands in the country—and is recognized by the band, as well as by the authorities, as a chief. Mr. Brown and Mr. Williamson settle this point.

"*Nor-hop-ton*" is a chief, and has been for years. His band numbers over 300, and he is recognized by it, as well as by the government, as a chief. Dr. Foster, Mr. McLeod, and the two first gentlemen, testify positively to this fact.

"*Ink-pah*" is a chief; has a small band; is recognized by it, as well as by the government. Such is the testimony of Mr. Williamson, Mr. McLeod, and Brown, men who have lived among the *See-se-toans* for years.

"*O-tah-e-ta*" has a band, and is recognized and on the payment roll as a chief. Mr. Prescott testifies to the chieftainship of all the chiefs named.

These are the only chiefs whose authenticity is disputed. There are many others known to be chiefs, and to have been at the heads of bands for years. This is the evidence of men who have lived among them fifteen to thirty years; and yet such men as Shafer, a boy reared in Philadelphia, never in the Indian country in his life until he came as clerk to Mr. Sweetser, and after a residence of six months in the country, the bands scattered over many hundreds of miles, is brought upon the stand to testify to who are and who are not chiefs. This, in itself, shows the miserable shifts these men were forced to resort to in order to sustain charges which they know to be false and unfounded.

Some of the witnesses mention several other *See-se-toan* chiefs in the remote bands, but those named are testified to with certainty.

Thus have we shown, by testimony the most positive and certain, that eight out of the ten chiefs present at the payment have given to Governor Ramsey positive direction to pay the \$250,000, according to the distribution made at the time of the treaty. We have the assent of "Big Curley," voluntarily given, which makes nine out of the eleven or twelve chiefs of the "See-see-toans" and "Wah-pay-toans;" being four-fifths of those present, and three-fourths of the whole. A simple majority was enough—a simple majority of those present were sufficient to give direction for the disbursement of that fund.

It is in evidence by Doctor Foster, Mr. McLeod, Mr. Brown, and others, that most of the chiefs signing were from the first in favor of paying their debts, but were restrained from going into general council by Red Iron and his soldiers, and this is the reason why we find "Ee-tai-wah-keen" signing the voucher at one time; "Wah-nah-k'soon-ta" at another; "Waa-na-ta," "No-hope-ton," "Wam-chi-he-pe-duta," "Esh-ta-hum-ba-koosh-ka," at another; "O-tak-e-ta" at another, and "Hoo-pah-ee'n'k-pah-dutah" at another. Another fact in evidence is that these chiefs, although they did not sign at the same time, voluntarily came forward to Governor Ramsey, and told him they desired to sign a paper paying their traders and half-breeds. This is the testimony of Mr. Steele, Mr. Foster, Mr. Farribault, and others, who were present when the voucher was signed. These gentlemen all testify, that that receipt was fully and fairly read and explained to them before it was signed, and that they understood its true purport and meaning.

Where then is the violation of law, treaty stipulations, or the rights of the Indians? Where is the fraud? Where is the evidence of it? Where the evidence that would give rise to a suspicion of fraud in a virtuous mind? We say there is none. The very letter of the treaty was complied with. The payment was made by direction and at the request of four-fifths of all the chiefs who could possibly be got together at the time of the payment. The number assembled was an unusually large one, when we consider that this was late in the season, snow on the ground, and the Indians scattered over hundreds of miles.

It has been held, and we presume from intimations from the commissioners during the investigation it is in their report, that the voucher was not signed in open council. The voucher was signed by every chief whose name is appended to it in *open council*. An *open council* may be held with *one chief* and his young men just as well as with twenty. A single chief, with but half a dozen of his men, going before the agent or superintendent to transact any business, constitutes an open council to all intents and purposes.

A *general council* is the assemblage of all the chiefs and men at the encampment where it is called.

A *full open council* contemplates a meeting or assemblage of all the chiefs or bands interested in the objects for which the council is called.

Thus do we show a literal compliance with the treaty of Traverse des Sioux. That treaty does not contemplate, nor does its language express anything but a direction and request from the chiefs in "open council." That request was made, and thus ends our consideration of Traverse des Sioux.

The payment made at Mendota, as we have proved by the testi-

mony of Mr. Sibley, Mr. Steele, Mr. Farribault, Agent McLane Forbes, and Mr. Prescott, was made in accordance with the undirection of all the chiefs of the Me-da-wa-kan-toans band, in open council.

The receipts containing the request and direction to pay \$70,000 to their licensed traders, and \$20,000 to the chiefs themselves, signed by all the chiefs, and is to be found on pages 17 and 18 of Senate document 29, part ii.

This receipt was signed in open council. It will be remembered that at the last council in which "Wabashaw" made the demand were Good Road, Bad Hail, Medicine Bottle, and Little Six's. They made the request to Governor Ramsey to pay their traders, and the governor advised them to consult among themselves, and try to come to some united understanding about the manner in which they desired the money to be disbursed. Very shortly afterwards, we find "Wabashaw" himself requesting Mr. Steele to send for Governor Ramsey to come to see them, as they had agreed to sign a paper directing him to pay \$70,000 to their traders, \$20,000 to the chiefs, and to retain the remaining \$20,000 of their fund for their removal and subsistence. The governor is sent for, he goes at once to see Wabashaw, finds him and Wakoota in council with their bands at Mendota. He asks him why he sent for him, and the chief tells him that he and Wakoota are ready to sign the vouchers. It is true, at that time he had asked the governor to pay the chiefs the removal and school fund in his own hands, and was denied, as he should have been. He then waited for a short time to consult with Wakoota and their head men, who were present; the governor retires from their council; they are left to themselves, all restraint is removed, in order that their consultation among themselves may be free and general; they remain in council for some time, when the governor is again requested to join them; he joins them, and they request him to prepare a voucher and direction. He does so; but requests them to join the other chiefs at Mendota, and that at the same time they do. This they decline to do, as will be seen by the testimony of Mr. Steele, because they had been slighted by the other chiefs, who had enjoyed a feast without inviting their attendance. The voucher is then prepared and they sign it freely and voluntarily. This council was held at their own request. The governor was not there for at their request. The voucher is prepared at their request. Was it with others? Governor Ramsey goes to Mendota on the following morning and finds Little Crow, the Star, Shakapee and Good Road in council, awaiting him and anxious to sign the voucher. It is then explained to them by Mr. Farribault. They say they understood it, and explain what it is. It is then signed by them; after which one of them makes a speech to the governor in regard to it, in which he expresses the satisfaction of the whole of the Indians at the fact of their money being paid their traders, and the general good feeling existing among themselves in consequence of it.

Grey Iron states that he signed the voucher freely, after it was explained to him. "Mauk-pe-we-chasta" signed it in presence of the chiefs but Wabasha and Wakoota. At the time he signed it

explained again to all the chiefs present, and they said they were satisfied with, and understood it.

But to prove the unquestionable propriety of the manner in which this voucher was obtained, we need not go beyond the testimony of the chiefs themselves. They testify, notwithstanding the anxiety manifested, as will be seen from the questions put to them, to show they had been bought and bribed, that they signed the receipt voluntarily, in open council, and that they never received anything for doing it. The effort made, to show that the \$20,000 they received was given them as a bribe, failed most signally. The chiefs themselves deny it, and the testimony of Mr. Sibley is a full and conclusive refutation of the charge.

Where then is the evidence of treaties violated and laws disregarded? Where is the evidence of injustice, cruelty, or wrong, towards the Indians? It is not to be found upon the record; it does not exist in fact, and thus have the charges of Madison Sweetser and D. A. Robertson fallen proofless to the ground.

Here are the concluding acts of these chiefs, freely and voluntarily done, giving a full and unequivocal direction to Governor Ramsey; and in open council requesting him to pay out these various sums of money in the exact manner in which they were paid.

Thus have we shown in both instances, in the lower, as well as the upper payment, a strict compliance with the very letter of the treaties. To dispute this, is to charge all those witnesses, whose names have been cited during the consideration of the manner in which those vouchers were obtained, with direct moral, if not legal, perjury.

Such a charge would hardly be made even by the most reckless; more especially, if he knew the character and standing of the men who have proved these facts. They are men whose integrity is beyond suspicion, as in this instance they are beyond reproach. They are men who had no interests involved in this investigation, and whose minds and feelings were unbiased.

There may have been, perhaps, one partial departure from the strict letter of the treaties. There is no written, though there was an oral direction upon the records, authorizing and requesting Governor Ramsey to retain the amount he did, for their removal and subsistence.

But instead of this being made a charge, strange to say, by the strict constructionists of these treaties, he is charged with not having retained enough. This is one of the singularities, of which there are many, in those charges. Here he is first charged with violating treaty provisions, where he had made a strict literal compliance; and in the very next charge, he is charged with not having kept a sufficient sum for a purpose for which he had no written authority to place upon the record. How can these men reconcile these charges? How can they reconcile them with the truth, as it was *known* to them?

But if this was a departure from the letter, it was not from the spirit of the treaty stipulations; and in this case, as well as in the others, it will be seen from the letter of instructions from the Indian bureau, as well as from the testimony of Hon. Luke Lea, then commissioner, and of Mr. Tyler, that Governor Ramsey, in all cases, acted under orders; not, it is true, in all as to the sum retained or paid, but as to the acts of retaining and paying. The amount to be retained was placed at his

discretion. But this matter has been discussed before ; and besides the removal and subsistence fund is not a matter of serious charge, nor is there a word of testimony to sustain it. If, therefore, there was even an error in this matter of retaining a sufficient sum for removal and subsistence, which is not the case, it was but an error in judgment at most, for which Governor Ramsey, nor any other public officer, can be held accountable to his government.

Having, we think, fully disposed of the charges that Governor Ramsey violated the law and treaty stipulations, and having showed by his acts that these charges are untrue, we will proceed to a brief reply to the charge :

“ That Governor Ramsey paid contractors for supplies furnished for the Dakota Indians in bank notes and drafts, in violation of law.”

To be brief with the disposition of this charge, we admit that he did pay a few individuals, but not contractors, for supplies furnished the Dakota Indians, in bank notes and drafts, but not in violation of law ; and while we admit the payment in bank notes and drafts, we hold that the proof is, they were paid in that kind of funds by their own request ; and we have yet to learn of any law which prohibits a man from receiving, in the payment of a debt, such kind of money as he may see proper ; for it will be remembered, that if the payer violated the act of August 6, 1846, to which, we presume, reference is had, the payee was equally guilty. But Messrs. Brown, Sibley, and Marshall were not “ creditors of the United States,” but creditors of the Indians, and paid out of their proper funds, and therefore, not within either the letter or the spirit of the act referred to.

The second charge of Mr. Sweetser is : That Governor Ramsey received from the government of the United States some \$493,000, in the national currency of the government to pay the Dakota Indians, and exchanged the national currency, thus obtained, before leaving the eastern cities, for bank paper and drafts, and that he paid the bank paper and drafts upon government contracts, and that he returned the receipts therefor to the department for settlement of his accounts.

In answer to this charge, we say that Governor Ramsey did not receive from the United States government \$493,000, or any other sum of money, to pay the Dakota Indians, in the national currency of the government ; that he did not exchange the national currency for bank paper and drafts ; that he did not pay bank paper and drafts on government contracts, and consequently did not return receipts therefor to the department for the settlement of his accounts ; and there is not one syllable of evidence upon the record to sustain either of the allegations contained in the charge.

The first and second charges of Mr Robertson, are :

“ That Governor Ramsey exchanged a large portion of the gold received by him to pay the Dakota Indians, for bank notes, and that he deposited a large portion of said gold in bank, in violation of law.”

In answer to these charges, we reply that Governor Ramsey did not either deposit or exchange any gold received by him to pay the Dakota Indians.

Notwithstanding the last four charges have been answered categori-

cally in the negative, and that we might have rested here, with the single declaration that there is nothing on the record to sustain either of them; yet, as before remarked, we desire to exclude nothing, and have not hesitated to place the truth upon the record upon all occasions; and here admit that, though the charges are untrue, Governor Ramsey did receive from the United States treasury, some \$490,000 in treasury warrants, payable at the office of the assistant treasurer, in New York; that he did deposit these warrants in the "Merchants' Bank" and "Bank of Commerce," of the city of New York; that he did draw on these deposits for a small amount of bank notes, which he brought with him to Minnesota, and paid out, not to creditors of the United States, but to creditors of the Sioux or Dakota Indians; that the remainder of these deposits, except gold enough to pay the annuities, he left in bank, subject to his drafts, and payable in gold. He received no drafts from these banks, but drew his own upon the deposits.

These are the facts. A deposit was made, but no money was exchanged. *Gold* was the only currency paid to the Indians; *gold* was the only money paid to government creditors.

To traders, half-breeds, and others, creditors of the Indians, gold was invariably paid when preferred. They all had their choice to receive paper or coin; and, when either paper or drafts were paid, they were generally paid upon request.

But let us look for a moment at the position in which Governor Ramsey found himself. He was placed in the possession of a large amount of money; he had given no security for its faithful disbursement to the government, and was, perhaps, without the ability to do so; he was sensible of the responsibility he had assumed; he looked at the consequences of a loss of this money, and the manner in which it would affect his reputation. He was therefore anxious for his own security, for the Indians, their creditors, and above all for the security of the government, and adopted that plan which he considered most likely to effect his object, and which he considered himself authorized by law to do. He made a deposit in a safe and solvent bank, subject to his drafts, and payable in gold; from this deposit he drew, for the sake of safety as well as convenience, a small sum of bank paper of unquestionable credit, at par in New York, and superior to coin in Minnesota. Thus was this fund made secure to the government; he was placed beyond the reach of censure, and the persons to whom it was paid were greatly benefitted; the government was saved from needless risk, needless expense, and the Indians and their creditors entirely satisfied. And if these objects were all attained, who can complain? They were attained, and the only benefit resulting from it to Governor Ramsey was, his security, and the convenience afforded in the easy transportation of the money. Another advantage in depositing the money consisted in this, that after it arrived here, in the event of the payments from any cause being deferred, it was susceptible of being safely and securely kept; whereas, so large an amount of coin might not have been entirely safe here.

Security, and security alone, was the object of Governor Ramsey in making these deposits. Every dollar of the money has been accounted for, and not one dollar of profit has resulted to him. Why then these

charges? Who has been injured or wronged? Where are the evidences of the frauds with which he has been charged? Let the consciences of those who made the charges answer!

But, in addition to this, Governor Ramsey was fully authorized to make this deposit. Conceiving that he did not fall within the class of officers enumerated in the act of Congress, of August 6, 1846, he wrote the letter of Mr. Comptroller Whittlesey, of May 15, 1851, which, after quoted, fully authorized him to deposit and draw for the money as he saw proper. His power of attorney from the Seeseetoans and Wahpaytoans, was not only an authorization, but a full justification for the deposit to the amount of \$275,000, and if he had seen proper, to change that amount for bank paper. In regard to that fund, if possible, he was under stronger obligations to see to its security, than was for the residue of the fund. It was a private fund—such to a tent and for all purposes—and, even in the hands of one of the ablest and most prudent treasurers, would have been such. But these points are sufficiently answered already, and will be referred to again in the paper upon the sub-treasury law.

We will revert for a moment to one of the allegations contained in the sixth charge of Mr. Robertson. It is that portion of it which charges the creditors of the Dakota Indians with being the "*fraudulent elements*" of the Dakota money.

Some stress has been placed upon the manner in which the accounts of the various creditors of the Indians were authenticated, and that Governor Ramsey was not justified in paying those accounts as presented to him.

Here let us premise before answering these allegations. Let us pause for a moment at the proof in regard to this matter, as it appears in the commissioners' record.

It has been conclusively shown that the See-se-toans and Wahpaytoans admitted and acknowledged an indebtedness to their traders for over \$400,000; that they asked the commissioners to allow \$300,000 for them, and \$100,000 for their half-breeds. It is in evidence that the Wah-pay-toans and See-se-toans declined signing the treaty, or accepting the propositions of the commissioners, unless they did allow something for debts, which were honestly due their traders. And there is no doubt but they had to give them—and, as is the fact in proof, they gave them—assurances that the sum of \$275,000 was for their traders and half-breeds.

It is in proof, by many witnesses, that the Medawakantoans acknowledged an indebtedness, by their own summing up, of \$149,000 upwards to their licensed traders, and that they twice refused to sign the treaty unless some allowance was made for their creditors; and the presumption is that they had assurances to that effect before they signed. This fact is not in proof, but it is nevertheless true.

Then here is an acknowledgment of indebtedness by these bands for \$550,000, the whole of which was paid with \$280,000, or two thirds with one.

Thus, accounts amounting in the aggregate to over half a million dollars were presented to Governor Ramsey for payment. This is to be a large sum of money; but it loses that character when we

sider that many of the gentlemen who were claimants under these treaties had been trading among and supporting whole bands of the Indians for more than a quarter of a century. They had solemnly sworn to these accounts when they presented them, and many of them—all who were called—re-affirmed and re-testified to their correctness before the commissioners in this investigation. To deny their correctness, and to sustain this charge, would be fixing upon these men deliberate perjury, and adding it to the fraud that is alleged. We do not think any man can be found sufficiently reckless to reiterate a charge so monstrous. These are men who have held, and do now hold, positions of distinction, both socially and politically. Who are they?

Henry H. Sibley, twenty-one years a resident in the country, and three times elected delegate to Congress.

Martin McLeod, fourteen years a resident, four years a member, and one year president, of the legislative council.

Norman W. Kitson, long a resident, and member of the council.

H. L. Dousman, an eminent citizen of Wisconsin, and for thirty years one of the most prominent business men of the northwest.

Philander Prescott, government interpreter, and superintendent of Indian farming.

Joseph R. Brown, long a resident, just elected to the council, and editor of the "Minnesota Pioneer" newspaper.

Franklin Steel, for ten years sutler at Fort Snelling, and one of the principal business men of the Territory.

Alexander Farribault, a member of the legislative assembly.

William H. Forbes, postmaster of St. Paul, four years a member, and one session president of the council.

Kenneth McKenzie, many years a prominent merchant of St. Louis.

Alexis Bailey, a member of the house of representatives of Minnesota.

Louis Roberts, county commissioner of Ramsey county, formerly Commissioner of Public Buildings.

James Wells, a resident for more than a quarter of a century, and member of the legislature ever since the organization of the Territory.

These are the men who are charged by Sweetser and Robertson with wilful and deliberate perjury; and not only these, but scores of others, men of unimpeachable character; but, instead of being "fraudulent recipients" of the money they did receive, they got but little more than half of what was justly and honestly due to them.

But by whom are these charges made?

Let us examine this question for a moment, and then leave them in the obscurity from which they hoped to force themselves, by making public charges, and having their names connected in them with men of public distinction:

Robertson, politician, whose object, apparently, was to destroy the political standing of Governor Ramsey and others, by these means.

Sweetser is a disappointed Indian trader, who used every means in his power to obtain the control of the Sec-se-toans' and Wah-pay-toans' money—as will be seen from his powers of attorney, and the evidence upon the record—and, being frustrated in these attempts, sought to create a sympathy for himself by traducing others.

One word in regard to the paper presented to Governor Ramsey, by the Indians, at Merryck's store, and we have done:

The evidence in regard to this matter is in confusion. A paper presented, but this was after all the business at the Traverse had completed, and when Governor Ramsey no longer had it in his power to alter it. The paper contained a request that Governor Ramsey should appoint Mr. Sweetser, Mr. Williamson, and Agent McLeary to examine into the correctness of the accounts of all claimants. It was signed by no one, explained by no one, and simply placed in his hands after he had proceeded some distance in his sleigh, *en route* to St. Paul. The Indian who handed him the paper was a young man, without authority, and no evidence even of what band he was a member of. Could Governor Ramsey take this paper as a guide, in opposition to the action of the nation at the time of the treaty—*at the time* they executed to him the power of attorney at St. Paul, *at the time* the amendments were signed, and their almost unanimous approval *at the councils* he was just leaving, and that, too, after every arrangement had been completed and perfected, and the receipts received for the money? This matter was unworthy of notice—and we leave it to the public to decide.

Governor Ramsey has now fully, fairly, and unquestionably sustained by direct, positive, and unimpeachable testimony, each link of the chain, which is required in the aggregate to sustain a performance of his duty in the matter of the Sioux payment. There is not a single link missing in the whole proof. Every link in the chain is perfect. He stands before the country and before his government an innocent and unimpeached man, proved to have been a most worthy and faithful officer.

He has been maligned, vilified, and traduced by the corrupt and envious, both of the people and the press; but when his conduct in this matter becomes known to the world, those slanders will react upon their heartless perpetrators with a ten-fold force. His name and reputation will be free from every stain, and placed beyond the reach of petty libellers, while they, like the disappointed viper, erring in its aim and fastening its fangs upon itself, will infuse the venom intended for him, into their own hearts and die writhing in the pangs their own envy and malignity have produced.

SUB-TREASURY ACT, AUGUST 6, 1846.

Although no law is specified, the provisions of which Governor Ramsey is charged with having violated, yet, from the connexion in which the charges are made, we presume they have reference to the sub-treasury act of August 6, 1846.

The facts generally upon which those charges are founded, have been fully dwelt upon in the preceding part of this paper. But for the sake of perspicuity, and in order to a full and just appreciation of the points made in the charges, a brief summary will not be inappropriate here.

In 1851, in connexion with Luke Lea, the then Commissioner of Indian Affairs, Governor Ramsey negotiated two treaties with the Sisseton and Dakota Indians of Minnesota. By these treaties a large territory was ceded to the United States; in consideration of which cer-

among other things, the government was to pay some \$495,000. These treaties were amended by the Senate, ratified and sent back to Governor Ramsey to obtain the assent or ratification of the Indians to those amendments. At the time the Sec-see-toans and Wah-pay-toans ratified those amendments, they executed to Governor Ramsey a power of attorney, authorizing him to draw, receipt for, and appropriate the sum of \$275,000, named in the treaty of Traverse des Sioux, "*in accordance with, and for the purpose of carrying out the equitable and true intent of the 4th article of that treaty.*" Governor Ramsey accepted the trust, and proceeded to Washington with the ratified amendments. When he arrived there, he was requested by the department to take charge of the whole fund. He consented to do so, and was entrusted with treasury drafts, amounting to some \$500,000, which he carried with him to New York, and for the security of the government, the Indians, their creditors and himself, there deposited them in the "Merchants' Bank," and "Bank of Commerce." Upon these deposits, he checked and drew out a large amount of gold, sufficient to pay the whole of the annuities due to all the Sioux Indians, as well as to meet other demands for the same kind of funds, and a small amount in bank notes, at *par* in New York, and, in consequence of its convenience preferable to gold in Minnesota. The balance he left on deposit, subject to his drafts and payable in gold. Gold was paid to the Indians, and gold was paid to claimants whenever it was preferred. The claimants mostly preferred paper money, and generally requested it; and the drafts were preferred to either, as they were worth a premium at St. Paul. Two or three persons, who had accounts for supplies furnished for the Indians, were also paid in drafts and paper money, but at their own request. Upon these facts, Governor Ramsey is charged:

1. With having violated the provisions of the sub-treasury act of August 6, 1846, in making these deposits in bank;
2. With having violated the provisions of the sub-treasury act of August 6, 1846, in paying claims for furnishing supplies for the Indians in paper money and drafts.

Governor Ramsey does not fall within the class of officers enumerated in that act, nor were the deposits and payments made by him of the Sioux funds—deposits and disbursements of the character contemplated by its provisions. The deposits and disbursements contemplated by that act, are those made by officers and others "*charged*" by that, or some other act of Congress, with the "*collection, safe-keeping, transfer, and disbursement of public moneys.*" The disbursements here referred to are disbursements within the general purview of the office through which they are made; a part of the ordinary duties incident to the office, and "*charged*" upon the incumbent of the office to perform. These disbursements are disbursements made in the ordinary course of official duty, and by persons "*charged*" by law, or by some regulations of some of the departments made in pursuance of law.

In receiving the moneys entrusted to his care, Governor Ramsey was performing no duty enjoined upon him by law; no regular or ordinary duty pertaining to his office of superintendent, but an accidental one only, imposed upon him, directly or indirectly, by the President of the United States. Thus the deposits and disbursements made by him,

differ in every particular from those contemplated by the sub-tr act of 1846. The funds distributed or paid out by him, were in contemplation of that act, "public moneys of the United States" disbursed in the ordinary course of any official duty, or to meet the ordinary expenditures of the government of the United States.

Governor Ramsey was not an "officer" or "depository" "charged with the *safe-keeping, transfer, and disbursement* of public moneys in contemplation of that act, to whom any "officer" or "depository," "charged" by law "with the *safe-keeping, transfer, and disbursement* of public moneys" might, upon an order from the proper department or officer of the government, make a "transfer" of the moneys in his possession and custody. This is the proper construction and that it is so is made manifest by the fact that, in all cases of "transfer" provided for by law, from one officer to another, or from one depository of the public moneys to another, the object and purpose of "transfer" is the safety of the public moneys and the convenience of public service. The object of this *transfer* was neither. The moneys subject to "transfer" are *strictly public moneys*, placed for safe-keeping, transfer, and disbursement with the several depositories, and being held subject to the order of the proper department or officer, to be paid out or again transferred to some other legally constituted depository as the case may be, or "as the safety of the public moneys or the convenience of the public service may seem to require."

There is no law *charging* superintendents of Indian affairs with *safe-keeping, transfer, or disbursement* of public moneys. The duties of superintendents of Indian affairs are prescribed by the act of June 1834, in these words: "The superintendents of Indian affairs within their several superintendencies, exercise a general superintendence and control over the official conduct and accounts of all officers and persons employed by the government in the Indian department, under regulations as shall be established by the President of the United States."

Governor Ramsey was, therefore, in this instance, simply a private individual, at the request of the government and for its convenience made the accidental medium of transmitting to the Indians a fund of money, accidental and extraordinary in itself, and forming no part of the ordinary expenses of the government, either in its intercourse with the Indians or otherwise. Nor was he made the medium of transmission in consequence of any duty imposed upon him *ex virtute officii*. It was optional with him to reject or accept the trust, and his acceptance could not affect his relations either to the government or to the law.

The sixth section of the act of August 6, 1846, defines and prescribes the class and character of the officers who shall be amenable to its provisions:

"The treasurer of the United States, the treasurer of the mint of the United States, the treasurers, and those acting as such, of the various branch mints, all collectors of customs, all surveyors of customs, also as collectors, all assistant treasurers, all receivers of public moneys at the several land offices, all postmasters, and all public officers of whatever character, be, and they are hereby, *required to keep safely out loaning, using, depositing in bank, or exchanging* for other funds of

allowed by this act, all public moneys collected by them, or otherwise at any time placed in their possession and custody, *till the same is ordered* by the proper department or officer of the government, to be *transferred* or *paid out*."

This is the descriptive clause, as well as in part the charging one of the act. Who does it *charge* to *keep safely*, without loaning, depositing, exchanging, &c., the public moneys placed in their possession and custody? Those, certainly, whose duty it is to collect the public revenue, in the first place, and in the second place, those who are constituted by law the "depositaries of the public moneys of the government." This act contemplates officers of no other character. But they are required to keep safely, &c., not only the moneys collected by them, but also the public moneys "*otherwise* at any time placed in their possession and custody."

The tenth section of the act now under consideration provides "that the Secretary of the Treasury may order a "*transfer*" of the moneys in the hands of one depositary constituted by this act, to any other depositary constituted by the same, at his discretion, and as the safety of the public moneys and the convenience of the public service shall seem to require."

Those persons to whom is addressed the prohibition of loaning, using, depositing, exchanging, &c., implies something more than persons who are made the mediums of transmission; but are such as have the *safe-keeping* or custody for a time; for if it were placed in the hands of those officers for disbursement, the presumption is, they would promptly perform their duty and pay it out; but if placed there to remain for an indefinite period, or until needed, the prohibition would not be without meaning. Therefore there can be no doubt of the character of the officer, or of the character of the fund placed in his custody. He is a depositary; the fund, the public moneys of the government, which he is charged to keep, &c.

The concluding clause of the sixth section reads thus: "And when *such orders for payment or transfer are received*, faithfully and promptly to make the same as directed, and to do and perform all other duties as *fiscal agents* of the government, which may be imposed by this or any other act of Congress, or by any regulation of the Treasury Department made in conformity to law, and also to do and perform all acts and duties required by law or by the direction of any of the executive departments of the government, as agents for paying pensions, or for making any other disbursements which either of the heads of those departments may be required by law to make, and which are of a character to be made by the *depositaries hereby constituted* consistently with the other official duties imposed upon them."

This portion of the section is conclusive, giving strength to the construction contended for. It makes it manifest that none others are contemplated by this section than those who are the legally constituted depositaries of the public moneys of the government.

This clause is also explanatory of the causes which induced the enactment of the law; a knowledge of which is ever most necessary to insure a proper understanding of the true meaning and spirit of every statute. The cause which gave rise to the passage of this act was the

practice of public officers and others "charged" with the safe keeping of the public moneys, of engaging in banking and other speculations upon the public moneys placed in their custody. Thus the government was made to risk the adventures they engaged in; and the moneys were not, at all times, ready to meet its demands. To prevent these things, and to insure the prompt and faithful disbursement of the public money, this act was passed. Hence the provision in the act, "to keep safely, without loaning, using," &c., and "faithfully and promptly" to pay out or transfer the same as directed. The officers herein contemplated are the *fiscal agents* of the government, those connected with the revenues or treasury of the United States. This is evident from the provision, "and shall do and perform all other duties as *fiscal agents*," &c. They are also required to do and perform all other acts and duties by the direction of any of the executive departments, as agents for paying pensions, or for making other disbursements "which either of the heads of departments may be required by law to make, which are of a character to be made by the '*depositories hereby constituted*,' consistently with the other duties imposed upon them. Who are required to make these payments and disbursements? The answer is conclusive, and *fixes* the character of the officers and persons contemplated by this act, *the depositories hereby constituted.*"

Thus do we close the consideration of the sixth section of this act; and in doing so, feel assured that we have placed upon it the only construction of which it is properly susceptible. That this section contemplates only the collectors of the revenues of the government and the depositories of the public moneys of the government, whose duty it is made to preserve and keep safely the same till they are appropriated and ordered to be paid out, or till they are ordered to be transferred either to the Treasury of the United States, or to some one of the depositories constituted by this act, there can be neither question or doubt.

We now come to the consideration of the provisions of the sixteenth and penal section of the act. It provides:

"That all officers or other persons *charged* by this act, or any other act, with the safe keeping, transfer, and disbursement of the public moneys, other than those connected with the Post Office Department, are hereby required to keep an accurate entry of *each sum* received, and of *each payment or transfer*, and that if any one of the SAID OFFICERS or of those connected with the Post Office Department, shall convert to his own use, in any way whatever, or *shall use*, by way of *investment*, in any kind of property or merchandise, or *shall loan*, with or without interest, or *shall deposit* in any bank, or *shall exchange* for other funds, except as allowed by this act, any portion of the public moneys intrusted to him for safe keeping, transfer, disbursement, or for any other purpose, every such act shall be deemed and adjudged to be an embezzlement of so much of the said moneys as shall be thus taken, converted, invested, used, loaned, deposited, or exchanged, which is hereby declared to be a felony; and *any failure to pay over or produce* the public moneys intrusted to such person, shall be held and taken to be *prima facie* evidence of such embezzlement."

In the first place, that this clause contemplates officers whose *general*

duty it is to receive, transfer, and disburse the public moneys only, and not those who are merely made the accidental medium of transmission from the hands of one officer or person to the hands and possession of another officer or person, is evident from the language of the provision. These officers are required "to keep an accurate entry of *each sum received* and *each payment or transfer*." This implies a *succession* of receipts, payments, and transfers. Were this not the case, and if it applied to persons who were the mere casual or accidental agents in the performance of these duties, the language of the act would have been different. It would not have been "*each*" sum, "*each*" payment, or "*each*" transfer, but *the* sum, *the* payment, or *the* transfer. It is therefore intended to apply to those who do these acts in the regular and ordinary course of official duty; the performance of which is charged upon them by law. In addition to this palpable construction of the provision, the word "transfer" has a special statutory meaning and signification when used in this act, and is only applicable to those "*transfers*" made by the order of the proper department or officer, &c., "from any one depositary constituted by this act to any other depositary constituted by the same." Therefore the officers who are required to make accurate entry of *each transfer*, must necessarily be those who are authorized to make such transfer, and can only refer to the *public depositaries* of the government. Then again, the officers or persons contemplated by, or amenable to, the provisions and penalties of this act, are those who are "charged" with the conjunctive duties of the safe keeping, transfer, and disbursement of the public moneys of the government, and as such, necessarily *depositaries* of public moneys.

"And if any of the said officers," &c., shall convert to his own use, any of the public moneys entrusted to them for safe keeping, &c., every such act shall be deemed and adjudged to be an embezzlement, &c., which is hereby declared to be a felony. In order to ascertain who "*the said officers*" are, alluded to in the second clause of this section, we must look to the character of the antecedents. Who then, are the *said officers*? They are those described in the first clause of this section, and who are "charged" with the *conjunctive duties* of the *safe keeping, transfer, and* disbursement of the public moneys; and as such, either *receivers, collectors, or depositaries* of the public moneys or revenues. And, if the antecedents to "*said officers*" are to be looked for, throughout the whole of the preceding sections of the act, it only gives additional strength and clearness, if that be possible, to the construction given to this clause; for throughout the whole of the intermediate sections the officers named are termed the "depositaries" of the public moneys, "the depositaries herein named," "the present depositaries," "said depositaries," "depositaries hereby constituted," "several depositaries;" and other reference to "depositaries" without number. And the phrase or sentence, "*any failure to pay over, or produce the public moneys*," implies a previous deposit or receipt of unappropriated public moneys, and also an order, from the proper department or officer, to pay over, or produce the same.

And again: "if any officer *charged* with *the disbursement* of public moneys shall accept or receive, or transmit to the Treasury Department to be allowed in his favor, any receipt or voucher from a creditor

of the United States, without having paid to such creditor in such full amount as the said officer may have received for disbursement, or such other funds as he may be authorized by this act to take in exchange, the amount specified in such receipt or voucher, every such act shall be deemed to be a conversion by such officer to his own use of the amount specified in such receipt or voucher; any officer or agent of the United States, and all persons advising or participating in *such act*, being convicted thereof before any court of the United States of competent jurisdiction, shall be sentenced to imprisonment for a term of not less than six months, nor more than ten years, and to a fine equal to the amount so embezzled."

This is the portion of the act upon which special reliance is placed by those who entertain the opinion that Governor Ramsey is guilty of a violation of this act. But why it is so, it is difficult to conjecture. It is one of the best defined and most easily comprehended clauses contained in the act; and strained must be the construction, and any court for a conviction that court which would so construe this portion of the act as to make it embrace an individual situated as Governor Ramsey was in respect to the Sioux moneys, or to make it amenable to its provisions. The first sentence of this provision explains all that follows. "And if any officer '*charged*' with *the disbursements* of public moneys &c. Firstly, then: the officer contemplated must be '*charged*' with this or some other act of Congress with the '*disbursements*' of public moneys. In the second, he must be also '*charged*' with making simply '*disbursements*,' which would imply but an occasional act coming within the purview of his official duties, but he is '*charged*' with making '*the disbursements of public moneys*,' thus using the definite article '*the*,' which gives it character, and the plural, which implies a succession of disbursements—making the meaning still more easily comprehended, and showing conclusively that this provision was intended to apply to those whose principal and most essential duty was made by law to disburse the public moneys of the government. It would seem to imply more than this, and charge him with a general supervision and control over the public moneys in the possession and custody of the several depositaries, who are *charged* with their safe keeping, transfer, and disbursement.

There can be no doubt, then, that this provision only contemplates those persons whose prime official duty it is to make '*disbursements*' and does not even apply to those whose occasional duty it may be to *virtute officie*, much less to be applicable to a private person, or even to a public officer of the government, upon whom no such duty was enjoined by this or any other act of Congress.

"And any officer or agent of the United States, and all other persons advising or participating in *such act*, being convicted thereof," Some stress has been laid upon this clause or sentence, but why, it is not an easy matter to perceive, as it is merely used as a reference to the officers who may be *charged* and found guilty of an act of embezzlement, and in fixing the penalty for the offence. It neither charges any duty upon any person, nor defines either duty or offence; but, as just remarked, it simply refers back to the persons charged with the performance of a duty, and fixes the penalty for its violation.

before abandoning entirely the preceding clause, it may be as well to suggest, in answer to a position assumed relative to the proper construction of that provision, that instead of enlarging the class of officers embraced in the general provisions of the act, it restricts it. Instead of enlarging it, and embracing all persons who may be accidentally or otherwise, at any time, entrusted by the President or departments with the disbursement of a fund for the convenience of the government, a strict construction would exclude those whose conditional duty it is, *ex virtute officii*, to make disbursements. The reasons for this construction have already been given, at some length, above.

But even if Governor Ramsey was embraced in the class of officers amenable to that provision, he is guilty of the violation of no part of it. He did not in any instance violate either the letter or the spirit of that law. He did not, as is charged by Messrs. Sweetser & Robertson, pay United States creditors either in bank paper or in drafts. Nor did he ever present or transmit, nor even receive or accept, any receipts or vouchers from any United States creditor or creditors, whom he had paid in bank paper or drafts; nor is there any evidence of such fact or act upon the record. It is true, in the printed Document of Senate, 29, part ii, page 8, there appears an account charged thus:

"The United States to Marshall & Co., Dr.," &c., for \$4,438 00; also an account of the same kind to Frederick B. Sibley, on page 10; also one of the same kind to Joseph R. Brown, on page 13 of the same document, for which several accounts, receipts or vouchers, were given to Governor Ramsey. But it will be seen, both from the accounts and the testimony taken in regard to them, that they were not "creditors of the United States," but "creditors" of the Sioux or Dakota nation or tribe of Indians, and paid out of their funds. But even had these individuals been "creditors of the United States," we have shown in the forepart of this paper that the funds entrusted to Governor Ramsey were not public moneys in contemplation of the act of August 6, 1846, for the reason that he was not such an "officer or "depository" under the provisions of that act to whom might be "transferred the public moneys of the government, or in other words that he was not "charged" by this or any other act of Congress "with the safe-keeping, transfer, and disbursement of the public moneys," or either.

The last clause of the 16th section provides as follows:

"And the provisions of this act shall be so construed as to apply to all persons charged with the safe-keeping, transfer, or disbursement of the public money, whether such persons be indicted as *receivers* or *depositories* of the same; and the refusal of such person, whether in or out of office, to pay any draft, order, or warrant which may be drawn upon him by the proper officer of the Treasury Department for any public money in his hands belonging to the United States, no matter in what capacity the same may have been received, or may be held, or to transfer or disburse any such money promptly, upon the legal requirement of any authorized officer of the United States, shall be deemed and taken upon the trial of any indictment against such person for embezzlement, as *prima facie* evidence of such embezzlement."

It is equally apparent, from the above, as it has been from all the preceding portions of the act, that its penal provisions and restrictions

'apply only to "officers and other persons 'charged by this or some other act of Congress' with the safe-keeping, transfer, and disbursement of the public moneys," &c., that is, such officers and other persons as *by law* are made the agents of the government to keep, transfer, and disburse the funds of the United States.

This clause, which is the governing one of the act, provides for the indictment of but two classes of officers, "*receivers*" and "*depositories*," in neither of which classes is embraced Governor Ramsey. Disbursements and transfers are incidental to both of these classes. They are made, from the nature of the offices, necessarily a part of their ordinary duties. These officers are charged with these duties by this act, and therefore are amenable to its penalties; and that they are the only classes that are "*charged*" is sufficiently evidenced by the general language and provisions of the last clause of the 16th section. For, if it had not reference to "*receivers*" and "*depositories*," and them only, why provide that "*the refusal of such person, &c., to pay any draft, order, or warrant which may be drawn upon him by the proper officer of the Treasury Department, &c., or to transfer or disburse*" such public money promptly, &c., shall be taken as *prima facie* evidence of such embezzlement? It had reference to them, and them alone. They are the only officers from whom disbursements can be made, or on whom government can properly draw for public moneys. Not only this, but the officers contemplated by this act are manifestly the *fiscal agents* of the government, that is, officers connected with the treasury or the public revenues of the United States, by virtue of law, or some regulation of the heads of departments made in pursuance of law.

Thus ends our construction of the law, and we close it with the full assurance of our own minds that it does not embrace Governor Ramsey by either the letter or in the spirit of its provisions. But we still have a few words by way of a general review of the whole. A portion of this will be directed to the construction of the act, and a portion to show that, even had Alexander Ramsey violated the law in letter, he had conformed with the strictest integrity to its *spirit*.

It has been shown, *first*: That none others are amenable to the provisions and penalties of the act of August 6, 1846, but those who are "*charged*" by this or some other act of Congress "*with the safe keeping, transfer, and disbursement of the public moneys of the United States.*"

Secondly. It has been shown that the moneys received by Governor Ramsey were no longer the public moneys of the United States, in contemplation of this act, after they were paid into his hands.

Thirdly. It has been shown that neither this act nor any other act of Congress has "*charged*" Governor Ramsey with the "*safe-keeping, transfer, or disbursement of the public moneys of the United States.*"

Fourthly. It has been shown that Governor Ramsey did not pay to any creditor of the United States bank paper or drafts, or present or transmit any vouchers therefor to the Treasury Department, to be allowed in the settlement of his accounts.

In addition to what has already been said in relation to the construction, it may not be inappropriate to add that this is a penal statute, and must be construed strictly, that is, in such a way as to embrace neither persons nor offences not clearly comprehended within its provisions.

There is nothing upon the record that affords any evidence of any motive on the part of Governor Ramsey to commit a fraud upon this act. On the contrary, the proof is abundant that his object in depositing the money, and in drawing upon it for a small portion of bank paper—*none of which was to be paid to the Indians*—was laudable, instead of being made the subject of censure, annoyance, and expense. He was governed by the purest and most honorable motives. Doing as he did do was to the advantage and for the safety and security of the government, the Indians, their creditors, and himself. By this act the government was the gainer, while he did not profit. The Indians were paid in gold, their creditors in funds more valuable than coin. The act was to the prejudice of nobody, to the advantage of many, and of no advantage to himself, except the convenience and security it afforded him, and wants all the elements of an evil intent, without which there can be no punishable offence.

And, if Governor Ramsey needed it, he is not without positive justification for his conduct, either as it regards the deposit, the payment of the drafts to claimants, or the manner in which the general payment was made.

By a letter from Mr. Comptroller Whittlesey, dated May 15, 1851, it will be seen that he had the authority of that able and faithful public officer to deposit moneys received by him to meet the expenses of the negotiation.

After stating that he has conversed with officers who had been long in the Treasury Department, and most conversant with the *practical construction* of the sub-treasury act of August 6, 1846, he says: "I concur in saying, that if the money is placed in your hands as a commissioner, or an officer to treat with the Indians, or any duty connected therewith, you have a right to deposit the same where you please, in your own name, and draw upon it."

This was the instruction given and the construction put upon that act, by the contemporaries of him who penned it, and by those most conversant with its true intent and meaning. Having in his possession that letter of instruction, Governor Ramsey did not hesitate to make the deposit. If he had a right to deposit the one fund, when he was acting and did receive it in an official capacity, he thought, clearly, there could be no wrong and no violation of the act of 1846, if he made a similar deposit in a private or individual capacity; and he was right. This letter takes from the act, even if he were "charged" by the act of 1846, all presumption of a wilful or fraudulent violation of its provisions. It was evidently the intention of the framers of that law to provide only against its wilful and fraudulent violations, and not to hold amendable to its provisions those who might have innocently violated them in letter, but who acted in strict conformity to their spirit. This would be a sufficient justification in itself, if we needed such; but we do not, and hold that neither in letter or spirit were the provisions of that act violated by Governor Ramsey.

An equal justification exists in regard to the manner of the payment. It will be remembered, that on the 8th of September, 1852, at the time the Wah-pay-toans and Sec-sec-toans ratified the amendments to the treaty of Traverse des Sioux, they executed to Governor Ramsey

a power of attorney, authorizing him to draw, receipt for, and appropriate the \$275,000 named in that treaty, "in accordance with, for the purpose of carrying out the equitable and true intent of 4th article thereof. See Senate Document 29, part ii, pages 25, and 27. Governor Ramsey accepted the trust. When he arrived Washington, he exhibited this power of attorney to Mr. Commissioner Lea, who suggested to him that he had better keep it, and use connexion with what is usually called the "Traders' Paper," (exhibited to him for the first time,) as a guide in making a distribution of the funds to be placed in his hands. He acted upon the suggestion of the commissioner, drew the whole fund, returned home, and paid out the amount due under the treaty of Traverse des Sioux, agreeable to the provisions of those two papers. See "Traders' Paper" schedule referred to, Senate Document 29, part ii, pages 22, 23, and 25. By virtue of his instructions, and of the opinion of his right to deposit the funds in the banks, he became relieved of the character he had been so previously of an "officer charged" by this act of August 6, 1846. This would also justify him in drawing paper money as the amount of paper money drawn from the banks is not one moiety of the amount placed under his personal control, by virtue of his authority from the chiefs and headmen of the Wah-pay-toan and Sisseton bands of Sioux Indians. This fund had not, therefore, passed beyond the control of the government, but also beyond that of the Indians. And thus do we justify Alexander Ramsey in every step whether it be the deposit of the fund, the payments made in paper money and drafts, or the general payment and distribution of the whole fund.

In addition to all these things there is still another. It has been, ever since the passage of the sub-treasury act of 1846, the uniform practice of almost all disbursing officers of the Treasury Department, as well as of the other departments, to keep their accounts in bank and check upon them in payment of government creditors; and as an example of this kind, and as the communication of Hon. E. Whittlesey, heretofore attached, will show, the Hon. Richard M. Young, formerly clerk of the House of Representatives, kept his accounts in bank to the amount of hundreds of thousands of dollars, and checked in payment of both members and officers of the body, of which he was the disbursing officer "charged" by law, upon which drafts, paper money was in some instances paid, but the greater part was paid in drafts on other banks, and this too at the city of Washington, where the United States Treasury is by law established. How, then, in the face of precedences of this kind, can Governor Ramsey be held accountable?

D. COOPER.

J. VAN ETEN, } *Counsel for Governor Ramsey*

WASHINGTON, February 6, 1854.

SIR: For the information of the Committee on Indian Affairs, I take the liberty of enclosing herewith copies of the following papers, viz:

A letter addressed me by D. A. Robertson, esq., late editor of the

Minnesota Democrat, one of the parties who, through the columns of said paper, as well as in a more formal manner, preferred against me charges of malfeasance in office. The letter is dated Washington, January 24, 1854.

An affidavit of Lieutenant Magruder, United States army, taken a few days since in this city, and which I offer in reply to the unsupported testimony of a few Medawakantoan chiefs that, at the time I counselled with them in the fall of 1852, they were in a starving condition. This complaint of starvation is a ready invention of Indians, and generally urged against their officers, without the slightest foundation in truth. To pretend that such could have been their condition in sight of Fort Snelling, St. Paul, and Mendota, is simply absurd; and as no specification indicated that any effort would be made to prove such a charge, as none but a few Indians testified to such thing during the three months that testimony was heard against me, I was thrown off my guard, and surprised when I found upon my arrival here that Commissioner Young had made this matter, although so improbable in itself, and poorly supported by evidence, a ground of serious charge against me.

No one at all familiar with Indian character could have been imposed upon by such a statement. I think I never knew Indians to fare better than these did during the period in question. Half-breeds and traders vied with each other in feasting them and bestowing favors upon them, for they were then upon the eve of having distributed among them the large annuities of this year, amounting to \$50,000. In former years but \$10,000 were distributed in annuities.

To my certain knowledge, while the Indians were encamped about the agency on this occasion, they made purchases upon credit to the amount of \$16,000, all of which they have ever since refused to pay.

All these things were well known in Minnesota, and had it been supposed that Commissioners Young or Gorman would have given the slightest heed to such statements from the Indians, they would have been then and there promptly met.

The affidavit of J. S. Watrous, late Chippewa agent, is enclosed. It has reference to the statement of a few chiefs and mixed bloods, that I refused to release certain Sioux prisoners unless the chiefs agreed to the payment of their debts: and here let me remark that while expatiating upon this piece of Indian testimony, Commissioner Young most unaccountably omits to state that the four interpreters, Prescott, Faribault, Brown, and Forbes, through whom these chiefs say I made this threat to them, each and all deny that I ever said anything to that effect, or that anything of the kind was ever interpreted to the Indians. This affidavit of Mr. Watrous corroborates what Mr. Sibley says on the same head.

Hugh Tyler, esq., came to St. Paul in July, 1853, to testify before the commissioners; but the examination on the part of the prosecution was protracted so long that Mr. T. could not wait the hearing on the other side, but, being compelled to return east, left his ex-parte affidavit, a copy of which I also enclose; and should the testimony, &c., in the investigation be printed by the Senate. I trust that this communication, with its enclosures, as well as my letter addressed to the Commissioner

of Indian Affairs of March 2, 1853, which is an important link in the history of the case, may, in justice to myself, be embraced in the order to print.

I have the honor to be, very respectfully, your obedient servant,
ALEX. RAMSEY.

Hon. W. K. SEBASTIAN,
Chairman Committee on Indian Affairs.

GADSBY'S HOTEL,
Washington, January 24, 1854.

SIR : In reviewing what I have said and the charges I have made in relation to your official conduct in the negotiation of the Sioux treaties, and paying out the funds under them, in which I was influenced by no personal or improper motive, and in view of the prejudice thereby excited against you as a man of character, I believe it to be but an act of simple justice to you and myself to say in an explicit manner, and before leaving this city to return to Minnesota, that the testimony in the late investigation of your official conduct in that regard satisfies me that you have been fully acquitted of having been actuated in said treaties or payments by corrupt or fraudulent designs, and I cheerfully say that, in my own opinion, after a full consideration of all the circumstances and facts in the case, that no stain rests upon your character in these transactions as a man of integrity.

It is proper to say, in this connexion, that I have never charged you with having received any pecuniary or personal consideration, but with what I believed to be violations of law, about which, I am aware, diverse opinions are entertained. I will add, however, without further reference to the legal questions involved, that if, in the opinion of any, my publications on that subject have attributed to you, directly or indirectly, any criminal intent or base motive, that you have been unjustly injured; and this frank avowal you are entitled to receive from me, whatever our relations political or personal.

Now, as heretofore, on this and all other subjects, public or private, I feel constrained to do what I believe to be right between myself and fellow man, and therefore address you this note.

Very respectfully, your obedient servant,

D. A. ROBERTSON.

Hon. A. RAMSEY.

DISTRICT OF COLUMBIA, }
Washington county. } ss.

Wm. T. Magruder, lieutenant United States army, upon his solemn oath doth depose and say: That as an officer of the United States he has been stationed at Fort Snelling, Minnesota Territory, since the month of October, 1851; that during this time he has had opportunity of learning much of Indian character; that in the latter part of the month of October, and the beginning of November, 1852, during the time that

the Indians were convened to council about the treaty funds, receive their annuities, &c., your deponent was frequently in their lodges as they were encamped about Fort Snelling and Mendota; that upon these occasions the Indians seemed to fare as well for provisions, &c., as they ever do; had there been any want of food among them, or any suffering in consequence of it, he would have learned of it through the Indians or others; your deponent believes that during this period their wants were as well supplied, and that they lived as well, as ordinarily. Your deponent is further of the opinion that the credit of the Indians at this time, in anticipation of their larger annuities, was better than at any other time, and that if not supplied from other sources, their own credit would have procured all they needed.

W. T. MAGRUDER.

Lieutenant United States Army.

Sworn and subscribed before me this 2d day of February, 1854.

J. W. BECK, J. P.

DISTRICT OF COLUMBIA, }
County of Washington. } ss.



Before me, J. W. Beck, a justice of the peace in and for the district and county aforesaid, personally appeared John S. Watrous, and made oath: That on or about the last of August, or the first of September, A. D. 1852, he, the said deponent, then being United States Indian agent for the Chippewas in Minnesota Territory, received instructions from Alexander Ramsey, then governor and superintendent of Indian affairs, in said Territory, to arrest certain Chippewa Indians, and to withhold the annuities of the Rabbit Lake band of Chippewas, subject to be turned over to the Sioux tribe of Indians, as a recompense for the scalps taken by said Chippewas from the Sioux. On or about the first of October of said year, I left the Chippewa agency for St. Louis, after the Chippewa annuity money, and on my return from St. Louis to St. Paul, I learned that during my absence from the Territory the Sioux Indians had been out on a war party and taken Chippewa scalps, and that some of said Sioux Indians had been arrested for the offence, and were lodged in the guard-house at Fort Snelling. On or about the 3d or 4th of November, of the said year 1852, I called on N. McLean, agent for the Sioux Indians, to see if the business could not be settled in some way, so that I might pay the Chippewa Rabbit Lake band aforesaid and all their annuities, and we agreed, as agents for these two tribes, respectively, that the Chippewa Indians should be paid their annuities and the Sioux then under arrest should be released, and that we would announce to the tribes over which we had charge, respectively, that for each scalp taken by either of the tribes, in future, they should forfeit the sum of five hundred dollars, and we further agreed that we would report our proceedings to Alexander Ramsey, governor and superintendent, for his approval. I did so, verbally, and the business met his approbation. This conference between Major McLean and myself was held at the instance of Governor Ramsey; after this, on the 4th November, 1852, I

times have considered myself, the agent and attorney of the half-breeds, and not in anywise the agent of Governor Ramsey, nor did I act in these premises at his solicitation; and further, he did not, to the best of my knowledge and belief, either through me or any one else, either directly or indirectly, profit, to the amount of one cent, by the payment of the moneys under the said Sioux treaties, nor did he ever make any request for any such participation, nor were there any promises held out to him that he should so participate; that, to the best of my knowledge and belief, Governor Ramsey acted in the premises alone from a desire to do his duty, as he understood it, and without any other motive whatever. This deponent further states that he knows of no confederating between Governor Ramsey and traders and half-breeds or others in making this payment, nor was your deponent ever employed to effect any such purpose; that so far as this deponent recollects, there was no conversation at any time between him and Governor Ramsey, or between Governor Ramsey and any trader and half-breed that could not, with the utmost propriety, without, in the slightest degree, affecting the fairness of this transaction in relation to the payment, have been made public; that this deponent was present during the negotiation of the treaties of Traverse des Sioux and Mendota and witnessed many public and private councils between the government commissioners, traders, and chiefs, in which the indebtedness of the Indians was fully acknowledged by the chiefs, to the traders assembled at those places, and a demand made by the chiefs that their traders should be provided for; that it was well understood by this deponent, as well as by whites and Indians present, as also by the half-breeds, at the respective treaty-grounds, as this deponent did then, and still does, believe that the sum of \$275,000 in the one treaty, and the sum of \$220,000 in the other, were intended mainly to pay the debts of their traders.

HUGH TYLER.

Sworn to and subscribed before me, this first day of August, 1853.

I. VAN ETTEN,

Notary Public, Minnesota Territory.

OFFICE OF THE SECRETARY, MINNESOTA TERRITORY,

St. Paul, October 28, 1853.

I, J. T. Rosser, secretary of said territory, do hereby certify: That Isaac Van Etten, a notary public, before whom the annexed instruments in writing were taken, was at the time of taking thereof, and now is, a notary public for Minnesota Territory, legally commissioned, sworn into office and duly authorized to take depositions, acknowledgments of deeds, and to do other official acts, and to all of his said official acts full faith and credit are due and ought to be given.

In testimony whereof, I have hereunto set my hand and affixed the great seal of the said Territory, this 28th day of October, in [SEAL.] the year of our Lord one thousand eight hundred and fifty-three, and of the independence of the United States the seventy-seventh.

J. T. ROSSER,

Secretary of Minnesota Territory.



